7871. By Mr. CULLEN: Petition of New York State Association of Letter Carriers, indorsing La Follette-Mead Saturday short workday bill, Dale-Lehlbach retirement bill, and Kelly postal policy bill; to the Committee on the Civil Service.

7872. Also, petition of the New York State Federation of Labor, indorsing Cooper-Hawes bill; to the Committee on Labor.

7873. Also, resolution of the American Federation of Labor, indorsing Dale-Lehlbach retirement bill; to the Committee on the Civil Service.

7874. Also, petition of New York State Ladies Auxiliary to New York State Association of Letter Carriers, indorsing Dale-Lehlbach retirement bill; to the Committee on the Civil Service.

7875. By Mr. DALLINGER: Petition of sundry citizens of the State of Massachusetts, favoring a Christian amendment to the Constitution of the United States; to the Committee on the Judiciary.

7876. By Mr. DAVENPORT: Petition of James H. Prichard, Utica, N. Y., favoring the passage of the Sproul bill (H. R. 11410) to amend the national prohibition act; to the Committee on the Judiciary.

7877. By Mr. HULL of Tennessee (by request): Petition of sundry citizens of Sumner County, Tenn., favoring an amendment to the Constitution relative to the election of Presidents and Vice Presidents; to the Committee on Election of President, Vice President, and Representatives in Congress.

7878. By Mr. KINDRED: Petition of the Bureau for the Suppression of Theft and Pilferage, protesting against the economic waste and loss caused by theft and pilferage in the harbor of New York particularly and throughout the United States generally and urging the passage of an act of Congress imposing the severest penalty possible for the theft and pilferage of merchandise in transit either on land or aboard vessels in any of the waters of the United States; to the Committee on Interstate and Foreign Commerce.

7879. By Mr. LINDSAY: Petition of Chesebro Brothers & Robbins, (Inc.), New York, urging support of House Joint Resolution 303, which includes products of fisheries; to the Committee on Interstate and Foreign Commerce.

7880. By Mr. McCORMACK: Petition of John W. O'Donnell, chairman, retirement committee, State Branch National Federation of Post Office Clerks, 120 Adams Street, Dorchester, Mass., urging early enactment of Senate bill 1727, amending the civil service retirement law; to the Committee on the Civil Service.

7881. By Mr. O'CONNELL: Petition of Pennsylvania State Camp, Patriotic Order Sons of America, favoring restriction of foreign immigration from Mexico, Central and South America; to the Committee on Immigration and Naturalization.

SENATE

THURSDAY, *December 6, 1928*

The Chaplain, Rev. ZeBarney T. Phillips, D. D., offered the following prayer:

Eternal Father, with whom a thousand years are as one day, Thou hast called us, whose lives pass as a watch in the night, into Thy service, and as the day is short, the work abundant, the laborers remiss, and the Master presses, make us bold and swift and brave to do Thy will. Write deep in our hearts the suffering and pain of many souls so wearied by the burden and the stress of life, and grant us such a vision of our world and its great need as shall make us instant and eager sharers with Thee in its redemption, now in the great day of our opportunity. Stay, we beseech Thee, the fever in our hearts and help us so to do our work that it shall never need to be undone. Grant this, O loving Father, through Jesus Christ, our Mediator and Redeemer. Amen.

The Chief Clerk proceeded to read the Journal of yesterday's proceedings, when, on request of Mr. CURTIS and by unanimous consent, the further reading was dispensed with and the Journal was approved.

MESSAGE FROM THE HOUSE

A message from the House of Representatives, by Mr. Chaffee, one of its clerks, announced that the House had passed the bill (S. 4402) authorizing the Secretary of the Navy to assign to the Chief of Naval Operations the public quarters originally constructed for the Superintendent of the Naval Observatory in the District of Columbia.

The message also announced that the House had passed the following bills, in which it requested the concurrence of the Senate:

H. R. 5528. An act to enable electricians, radio electricians, chief electricians, and chief radio electricians to be appointed to the grade of ensign;

H. R. 7209. An act to provide for the care and treatment of naval patients, on the active or retired list, in other Government hospitals when naval hospital facilities are not available;

H. R. 8537. An act for the relief of retired and transferred members of the Naval Reserve Force, Naval Reserve, and Marine Corps Reserve;

H. R. 11616. An act to authorize alterations and repairs to certain naval vessels;

H. R. 13884. An act to authorize the Secretary of the Navy to proceed with the construction of certain public works, and for other purposes; and

H. R. 14039. An act to regulate the distribution and promotion of commissioned officers of the line of the Navy, and for other purposes.

ENROLLED BILLS SIGNED

The message further announced that the Speaker had affixed his signature to the following enrolled bills, and they were signed by the Vice President:

H. R. 10869. An act amending section 764 of Subchapter XII, fraternal beneficial associations, of the Code of Law for the District of Columbia; and

H. R. 13753. An act authorizing an expenditure of certain funds standing to the credit of the Cherokee Nation in the Treasury of the United States to be paid to one of the attorneys for the Cherokee Nation, and for other purposes.

SENATOR FROM DELAWARE

The VICE PRESIDENT laid before the Senate the certificate of election of JOHN G. TOWNSEND, Jr., chosen a Senator from the State of Delaware for the term commencing on the 4th day of March, 1929, which was read and ordered to be placed on file, as follows:

BY AUTHORITY OF THE STATE OF DELAWARE.

To the PRESIDENT OF THE SENATE OF THE UNITED STATES:

Be it known, an election was held in the State of Delaware on Tuesday, the 6th day of November, A. D. 1928, that being the Tuesday next after the first Monday in said month, in pursuance of the Constitution of the United States and the laws of the State of Delaware, in that behalf, for the election of a Senator for the people of the said State, in the Senate of the United States.

Whereas the official certificates of returns of the said election, held in the several counties of the said State, in due manner made out, signed, and executed, have been delivered to me according to the laws of the said State, by the superior court of the said counties; and having examined said returns, and enumerated and ascertained the number of votes for each and every candidate or person voted for, for such Senator, I have found JOHN G. TOWNSEND, Jr., to be the person highest in vote, and therefore duly elected Senator of and for the said State in the Senate of the United States for the constitutional term to commence on the 4th day of March, A. D. 1929.

I, Robert P. Robinson, governor, do, therefore, according to the form of the act of the general assembly of the said State and of the act of Congress of the United States, in such case made and provided, declare the said JOHN G. TOWNSEND, Jr., the person highest in vote at the election aforesaid, and therefore duly and legally elected Senator of and for the said State of Delaware in the Senate of the United States, for the constitutional term to commence on the 4th day of March, A. D. 1929.

Given under my hand and the great seal of the said State, in obedience to the said act of the general assembly and of the said act of Congress, at Dover, the 19th day of November, A. D. 1928, and in the year of the independence of the United States of America the one hundred and fifty-third.

By the governor:

ROBT. P. ROBINSON.

[SEAL.] CHARLES H. GRANTLAND,
Secretary of State.

SENATOR FROM NEW JERSEY

Mr. EDGE presented the certificate of election of HAMILTON F. KEAN, chosen a Senator from the State of New Jersey for the term commencing on the 4th day of March, 1929, which was read and ordered to be filed, as follows:

THE STATE OF NEW JERSEY

I, A. Harry Moore, Governor of the State of New Jersey, do hereby certify that at an election held in the said State on the 6th day of November, 1928, HAMILTON F. KEAN was duly chosen and elected by the people of the said State of New Jersey to be a Member of the United States Senate for the term of six years, beginning on the 4th day of March.

In testimony whereof I have hereunto set my hand and caused the great seal of the State of New Jersey to be hereunto affixed at Trenton

this 4th day of December, in the year of our Lord 1928, and of the independence of the United States the one hundred and fifty-third.

By the governor:

A. HARRY MOORE.

[SEAL.] JOSEPH F. S. FITZPATRICK,
Secretary of State.

REPORT OF THE SECRETARY OF THE SENATE

The VICE PRESIDENT laid before the Senate a communication from the Secretary of the Senate, submitting a statement of the receipts and expenditures of the Senate, showing in detail the items of expenses under proper appropriations, the aggregate thereof, and exhibiting the exact condition of all public moneys received, paid out, and remaining in his possession from July 1, 1927, to June 30, 1928, in compliance with law, which, with the accompanying report, was ordered to lie on the table and to be printed.

REPORT OF THE COMPTROLLER GENERAL

The VICE PRESIDENT laid before the Senate a communication from the Comptroller General of the United States, transmitting, pursuant to law, the annual report of the work of the General Accounting Office for the fiscal year 1928, etc., which was referred to the Committee on Appropriations.

REPORT OF THE INTERSTATE COMMERCE COMMISSION

The VICE PRESIDENT laid before the Senate a communication from the chairman of the Interstate Commerce Commission, transmitting, pursuant to law, the forty-second annual report of the commission, which was referred to the Committee on Interstate Commerce.

RAILROAD RATES ON AGRICULTURAL PRODUCTS (S. DOC. NO. 183)

The VICE PRESIDENT laid before the Senate a communication from the chairman of the Interstate Commerce Commission, transmitting, in response to Senate Resolution 250, agreed to May 25, 1928, a report relative to the propriety of rates similar to the Canadian rates on grain, livestock, and other agricultural products in the Northwest, etc., which, with the accompanying papers, was referred to the Committee on Interstate Commerce and ordered to be printed.

NATIONAL FOREST RESERVATION COMMISSION

The VICE PRESIDENT. The Chair appoints the Senator from Georgia, Mr. HARRIS, a member of the National Forest Reservation Commission to succeed the Senator from North Carolina, Mr. OVERMAN, who has resigned.

PROPOSED MERGER OF DISTRICT STREET RAILWAYS (S. DOC. NO. 184)

Mr. CAPPER. Mr. President, I have here a report from the United States Bureau of Efficiency and a report from Dr. Milo R. Maltbie on the proposed merger of the street railways of the District of Columbia. It is a matter of great interest, and I ask that these reports be printed as a Senate document.

The VICE PRESIDENT. Without objection, it is so ordered.

ECONOMIC SYMPOSIUM ON NITROGEN

Mr. BAYARD. Mr. President, for some years this body, in conjunction with the House of Representatives, has been discussing the proper method of utilizing the power of Muscle Shoals for the benefit not only of the country, primarily, but, secondarily and possibly more permanently, of later years, for the benefit of the farmers and the farming industry of the country so far as the manufacture of nitrate is concerned. In recent years it has been apparent to those who have studied the subject of the production of nitrates that the invention based upon the use of water power has been slipping, commercially speaking.

In connection with that matter I desire to ask unanimous consent to have printed in the RECORD an economic symposium on nitrates consisting of a series of papers recently read at a meeting of chemists. They are very interesting, they are very valuable, they are very informative, and not only do I call them to the attention of the Committee on Agriculture and Forestry, to which committee the bill in relation to Muscle Shoals has been referred, but to every Member of the Senate and to the friends of the Members of the Senate. I think that this series of papers and the information divulged will prove to be of the utmost value to this body in determining what we shall do with Muscle Shoals as a nitrate-producing operation.

Mr. NORRIS. Mr. President, I would like to ask the Senator a question if he will permit.

Mr. BAYARD. Certainly.

Mr. NORRIS. Will the Senator tell us at what meeting of chemists the papers were read? The Senator said the papers were read at some meeting of chemists.

Mr. BAYARD. The general consensus of the papers, I will say to the Senator, is that the operation of extracting nitrates from the air is so tremendously expensive that it is no longer a commercial operation in view of other inventions that have come later. The Germans have discovered a synthetic operation which is away below the cost of operation by either the Muscle Shoals operation or any similar operation.

Mr. NORRIS. The Senator did not understand my question. I understand what the Senator is saying, but he did not tell the Senate at what meeting the addresses had been delivered.

Mr. BAYARD. That I could not tell at the moment; I do not recollect. This was a meeting of chemists from throughout the country at which the several papers were read.

The VICE PRESIDENT. Without objection, the papers will be printed in the Record.

The papers referred to are as follows:

[Reprinted from Industrial and Engineering Chemistry, November, 1928]

ECONOMIC SYMPOSIUM ON NITROGEN

Papers presented before the Division of Industrial and Engineering Chemistry at the Seventieth Meeting of the American Chemical Society, Swampscott, Mass., September 10 to 14, 1928

INTRODUCTION

William Haynes, chairman, 25 Spruce Street, New York, N. Y., publisher of Chemical Markets

The papers presented here are an experiment. For the first time a chemical problem is presented at a meeting of the American Chemical Society from its economic point of view by industrialists rather than by chemists.

Chemical economics is a subject which the technical man has oftentimes been accused of neglecting, to his personal loss and to the great detriment of the chemical industry. Business problems loom so large in the practice of applied chemistry that an opportunity to form a better and more direct contact, through the American Chemical Society, with the thought of business leaders should benefit not only the chemist and the executive, but also the society and the industry in general.

We have selected nitrogen as the subject of this first economic conference; first, because the nitrogen problem is timely; second, because of its wide and diverse interests; and third, because nitrogen furnishes an exceptionally pretty example of the complexities of economic chemistry.

Inasmuch as nitrogen is a vital and the most costly element of plant food, it is an interesting factor in our farm problem. Since it is an essential element in modern explosives, it is intimately connected with national defense and international politics. We are familiar with the astonishingly rapid technical advancements in nitrogen manufacture and the notable expansion of new chemical uses and new chemical processes employing this element.

At the present time the world's nitrogen production balances roughly with consumption; but new development programs, now actually under way, indicate that next year we will have a surplus production so great that, in spite of the growing use of nitrogen, consumption will not catch up for several years to come. The obvious economic result of this overproduction is going to be an intensely keen competitive market in which we will have the almost unique example of the three great types of chemical products—a natural product, Chilean nitrate; a by-product, ammonium sulfate; and a manufactured product, synthetic nitrogen in various forms—all in direct active competition.

To discuss these intensely interesting economic problems, we have five outstanding chemical industrialists, each by experience and daily contact preeminently well fitted to expound his chosen subject.

THE NEW ECONOMIC ASPECTS OF NITROGEN

Presented under the title "The New Place of Nitrogen in Chemical Economics," by Jasper E. Crane, chairman of the Board of Lazote (Inc.), Wilmington, Del.

In considering the economics of the nitrogen industry the first thought that comes to mind is the enormous importance of nitrogen to modern civilization. The inert gas, diluent of our atmosphere, produces by one of nature's paradoxes the liveliest sorts of compounds, essentials to our life. As a carrier of oxygen, nitrogen is the basis of explosives, and thus of national defense. It is one of the three essential plant foods—indeed, the one whose supply has been giving the world the most concern. An ample supply of nitrogen is a basic necessity for agriculture, to feed the increasing population. Cheap nitrogen is of similar importance to the farmer as cheap power is to the manufacturer. Permitting greater crops to be grown on the same amount of land, it is a labor-saving tool of the utmost value. Doctor Curtis was undoubtedly right in stating in 1924—"What is done with the nitrogen problem in the next 10 years will probably determine to a considerable degree whether present American standards of living can be maintained."

The nitrogen industry is also of first-rate commercial importance. The nitrate of soda trade is the outstanding feature of the economic situation of Chile. The receipts from by-product ammonia play an important rôle in the coke industry of the great industrial nations. Germany's great synthetic nitrogen industry has been a leading factor in her efforts toward financial rehabilitation following the war.

Thus it is natural that so many nations now aim to become self-contained with respect to nitrogen; the instincts of self-preservation both as regards self-defense and the food supply prompt that desire. Yet this is bringing into being nitrogen projects that are economically unsound. For instance, a plant large enough to supply only the military nitrogen requirements of a country will be too small to work economically and to lend any contribution to the needs of agriculture. To bolster up such a project by governmental subsidy wastes public funds and prejudices private enterprise.

Indeed, in considering nitrogen economics, one is struck by the many uneconomic things that are being attempted. Nitrogen fixation has become the fashion. Everybody is doing it. Many plants have been erected which are too small or improperly located with respect to raw materials or consuming markets to survive the coming competition. Another feature of the "uneconomics" of the industry is the lack of accurate statistics, particularly abroad. Accurate statistics are the foundation of sound economics; we must know what has been done in the past and what is going on to-day before we can look ahead intelligently. After all, the nitrogen industry is comparatively new, and it is all the more important, therefore, to get our basic facts right and not depend on premises which are unsound or hopes that may prove false.

WORLD PRODUCTION AND CONSUMPTION OF INORGANIC NITROGEN

At the beginning of the century the world's consumption of inorganic nitrogen was slightly less than 300,000 metric tons per year. By 1913 it had reached 750,000 tons. After the enormous requirements of the war had subsided the consumption of nitrogen in the six years 1919 to 1924, though fluctuating considerably, remained approximately constant at 1,000,000 metric tons. For the year ended June 30, 1927, the world consumed 1,300,000 tons. For the past year ending June 30, 1928, consumption has increased to the enormous total of over 1,600,000 metric tons. Analysis of these figures shows that the growth in consumption before the war was at the rate of 7.5 per cent, compounded annually, and if this rate had been maintained consumption this year would be nearly 2,000,000 tons. But it is surely fallacious to figure on cumulative percentage increase. Rather, we can get the best picture of the growth in demand by reducing the rates of increase to percentage, using the postwar consumption of 1,000,000 tons as a common denominator. On this basis the world's consumption of nitrogen increased 4 per cent, or 40,000 metric tons, per year in the decade ended 1910, 6 per cent, or 60,000 tons, per year in the period 1910 to 1914, 20 per cent, or 200,000 tons, per year during the war period 1914 to 1918, reaching 1,300,000 tons in the latter year, receded to 1,000,000 tons, and remained stationary in the six years following the war, and has increased at the rate of 10 per cent, or 100,000 tons, per year from 1924 to 1927, or at 15 per cent, or 150,000 tons, per year in the years 1924 to 1928. Through the whole period from 1901 to 1928 the increase has been at the rate of 50,000 tons per year. It will be seen that the world's consumption of nitrogen approximately doubled in the first 10 years of the century and has doubled in the 15 years 1913 to 1928. The rate of increase in demand in the past 4 years has been greater than ever, but it is too soon after the war to determine whether this rate will be maintained. If it is, the world will consume 2,000,000 metric tons of nitrogen by the year 1931–32 and 2,200,000 tons in 1932–33. If, as is more likely, the demand increases at most 100,000 tons a year, the world will not consume 2,200,000 tons until the year 1935–36.

Production has kept pace with consumption. Indeed, one is tempted to believe that since the war consumption has kept pace with production. Now, however, the world's productive capacity is being greatly increased, so that by next year, if all announced plans are carried into fruition, there will be a productive capacity of 2,200,000 metric tons several years before there is any expectation that the world can consume such a quantity of nitrogen. There is, therefore, in process right now a dangerous overexpansion of production facilities. It seems certain that competition will be very keen, low prices will continue, and uneconomic producers will fall by the wayside.

CONSUMPTION AND PRODUCTION IN AMERICA

Let us turn to the American figures, expressing these in short tons of nitrogen. It may seem foolish to use metric tons and short tons in the same paper, but then it is equally foolish for us in America to use pounds and short tons and all the other confusing weights and measures instead of the metric system. American consumption in 1901 was 45,000 short tons of nitrogen, rose to 150,000 tons in 1913, nearly to 400,000 tons in 1918 on account of the military demand, fell after the war to about 200,000 tons, and was almost 300,000 tons for the calendar year 1927. This year in America, as abroad, there seems to have been a great increase in the consumption of nitrogen, and the figure will probably reach 360,000 tons. Examining these figures, we see that the American consumption increased 9,000 tons per year from the beginning of the century to 1913, inclusive, or 6 per cent per year of the 1913 consumption. Since 1921 it has increased at the rate of 18,000 tons per year, or 6 per cent of the 1927 consumption. It is misleading to express the increase in percentage of each year's consumption, and it does appear to be definite that the rate of increase in the consumption of nitrogen in this country is now twice as great as it was before the war.

The American consumption was thus 14 per cent of the world's consumption at the beginning of the century, 18 per cent in 1913, and 20 per cent to-day. About 60 per cent of the American consumption is believed to be used in agriculture, undoubtedly a somewhat lower proportion than that in the rest of the world.

The opinion of those who have studied the problem thoroughly is that nitrogen consumption is relatively far too small. The use of nitrogen is in its infancy in this country, and it may be confidently expected that the rate of increase in consumption will be much greater in the future than it has been in the past. The imports of nitrogen products other than nitrate of soda and cyanamide into this country have increased rapidly in recent years, from 5,000 tons of nitrogen in 1924 to 13,000 tons in 1926 and 25,000 tons in 1927, and it is estimated that 50,000 tons of nitrogen will be imported this year.

Turning to the figures for American production, at the beginning of the century the United States produced 13 per cent of its requirements; in 1910, 18 per cent; in 1913, 25 per cent; at the present time, about 50 per cent. This increase in American production has been brought about almost entirely by the increase in by-product ammonia production, but the infant synthetic ammonia industry is now beginning to lend a hand. The production of synthetic ammonia in 1927 was about 18,000 tons of nitrogen, and this year it should be 27,000 tons. Next year, with the plants that are now building, production should exceed 80,000 tons and in 1930, 140,000 tons. If these expectations are realized, the United States will produce 65 per cent of its probable nitrogen requirements next year and 80 per cent by 1930. In addition our exports have mounted year by year, from 5,000 tons in 1918 to about 50,000 tons this year.

PRICES OF NITROGEN PRODUCTS

Without considering the great, inevitable rise in nitrogen prices during the war or minor fluctuations since the war, we can see that the price trend has been steadily downward, so that sulphate of ammonia sells to-day for two-thirds of its pre-war price, and nitrate of soda at 90 per cent of the 1913 figure. These figures, as compared with the general commodity price index of about 140 per cent of pre-war, show that nitrogen to-day is one of the cheapest of all commodities.

RISE OF SYNTHETIC AMMONIA PROCESS

The present reasonable price of fertilizer nitrogen is due to the effect of the synthetic industry. The production of by-product ammonia changes only slowly with the growth of the coking of coal and the consumption of gas, and has not exercised any positive effect on the price situation. If there should be a great overproduction of nitrogen throughout the world, by-product ammonia must all be disposed of, but it does not itself set the pace. Without the fixation of atmospheric nitrogen, the world's enormously increased demand for nitrogen could not have been supplied, and nitrogen prices would have remained very high. Yet, after all, nitrogen fixation is a very young industry; but progress is very rapid. Already the arc process is being put into the discard, production by the cyanamide process has increased very little in the past few years and probably will remain stationary. The production of synthetic ammonia, in which the Germans have so ably led the way, is, on the other hand, increasing very rapidly, too rapidly when the unsound projects mentioned above are considered.

The persistent idea of fixing atmospheric nitrogen at Muscle Shoals is an economic fallacy of the worst kind. The old and out-of-date cyanamide plant there could not compete with present processes and plants. The synthetic ammonia plant built in 1918 was not successful, and very large amounts of capital would be required to erect a modern plant, in a location which is completely unsuited for the synthetic ammonia industry, which requires cheap fuel and a situation favorable to consuming markets. Cheap fertilizer would not be manufactured at Muscle Shoals and, instead of conferring a benefit on the farmer, an attempt to manufacture there would hurt his interest by discouraging private enterprise, which is pushing forward so fast in solving the nitrogen problem for America.

In the synthesis of ammonia the cost may be divided into two parts, preparation of pure hydrogen and the synthesis step. Of these the manufacture of hydrogen is so important that we might almost refer to the industry as the fixation of hydrogen rather than the fixation of nitrogen. The preparation of hydrogen by electrolysis of water, with its large power requirements, can not be economic, except in isolated cases, such as in Norway, with a large already harnessed water power for which no other use is at hand. In the United States, where not over 25 per cent of the country's power requirements can be produced from water power, power is worth what it costs to develop from coal. The use of water power in this country for producing hydrogen for ammonia synthesis is therefore an uneconomic divergence of power. Hydrogen is most cheaply produced from cheap fuel, and the United States is as favorably situated in this respect as any country in the world.

An outstanding feature of the cost of synthetic ammonia is the very high cost of plant. High-pressure operations require heavy apparatus, and amortization of plant is one of the most important elements in the cost of production, nearly two years' sales being required to turn over the plant investment. The industry can not be tackled successfully on a small scale. Huge plants are required in order to

bring down the overhead expense and the labor per unit of product. Even with free hydrogen, a small plant could not successfully compete except for special purposes. Under the most favorable conditions of large plants, cheap fuel, economic location, technical skill, and ample and courageous financial resources success ensues but with a small profit per unit of product. As low prices are required by the economics of the situation, it is an industry of small margin of profit and large volume.

FUTURE OF SYNTHETIC AMMONIA INDUSTRY

The American synthetic ammonia industry of such recent origin is pressing forward and seems destined to have a very important future. Already much has been accomplished. Cheap nitrogen is now a fact in the United States. Ammonia prices are down to the European level, in some instances lower than abroad. A fact of interest to the chemical industry is that anhydrous or aqua ammonia is now, with the exception of lime, the cheapest base per unit of alkali equivalent. The manufacture of nitric acid in this country is rapidly swinging over from nitrate of soda to the oxidation of ammonia. The use of synthetic ammonia in fertilizer is beginning. Anhydrous ammonia for the refrigeration industry, in which America leads the world, is now supplied by the synthetic industry. Numerous tank cars are hauling anhydrous ammonia all over the United States. A start has thus been made in synthetic ammonia in this country, a large program of expansion is now under way. It remains to progress sanely and wisely, with a broad vision of future possibilities and with faith in our ability to develop them.

Without faith no discussion of economics is complete. Figures and theories alone do not make up the science of economics; the spiritual element must not be overlooked. Faith in our fellowmen—in other words, credit—is the basis of all financial structure. And in the nitrogen industry faith in American ability, supported by what has already been done, impels us forward. We walk by faith.

SYNTHETIC AMMONIA

E. M. Allen, president the Mathieson Alkali Works (Inc.), 250 Park Avenue, New York, N. Y.

The developments of the direct synthetic-ammonia process and its various modifications in the last 15 years have been so revolutionary that even many closely connected with the chemical industry do not fully appreciate its present position in the United States or fully realize the tremendous strides that have been made and that are now planned for the future expansion of this process, which produces pure liquefied ammonia gas in anhydrous form.

Much has been written on this subject by those who knew what they were writing about, as well as by those who did not, but virtually all of these papers have been discussions of the manufacturing process with theoretical costs of operation. It therefore seemed to be in order for the writer to approach this subject from a commercial viewpoint, not as a theorist but as an executive of a company that manufactures ammonia, sells ammonia, and is supposed to know the costs of so doing.

With the exception of a small amount of anhydrous ammonia produced from the cyanamide process, and one company that produces ammonia from gas-house liquor, practically all the anhydrous ammonia now made in the United States is manufactured by the synthetic process; and while in the past this product has been regarded almost exclusively as a refrigerant its most important and largest use now is as a nitrogen-bearing chemical commodity.

This is a chemical age, and in it things are moving so fast that little attention can be paid to experiences that are over 3 to 5 years old; and in the field of synthetic ammonia it seems that this time limit can be safely placed at from 6 to 12 months, and it is safe to state that no two installations are or have been identical. The president of one of the largest chemical companies in the world advised the writer that a new plant that his company was installing, that would cost millions of dollars, was virtually obsolete before its construction had even been started.

In discussing the commercial side of this subject the writer wishes to point out the glaring fault of most of our technical chemists—they neglect to pay enough attention to the commercial side of their industry, the inclination being to devote all of their time to the technical side of their scientific problems.

COSTS OF SELLING, DISTRIBUTING, AND TRANSPORTING

Very little has been written as to the cost of selling, distributing, and transporting of anhydrous ammonia, but to those executives who are responsible for the millions of dollars now invested in the synthetic ammonia plants it is a very important and serious problem.

Prior to 1925 anhydrous ammonia was shipped in cylinders containing 50 pounds, 100 pounds, and 150 pounds, and this type of container is still used exclusively for the shipment of anhydrous ammonia for refrigeration purposes, being considered the safest and most practical container to use for this trade. To-day there are between 185,000 and 200,000 cylinders in the hands of the manufacturers of anhydrous ammonia, all of which could be very easily handled by 100,000 cylinders. Here we have over $2,000,000 tied up in this class of equipment that is unnecessary, but the interest on this excessive investment has to be taken into consideration by the manufacturer in arriving at his exact costs.

Since 1925 specially constructed tank cars have been developed for this growing industry—first, those that would hold 30,000 pounds of anhydrous ammonia, and now the last word in tank cars for this trade is one that holds 50,000 pounds. While there are approximately 40 of these cars now in use, it is safe to say that before the end of 1929, 150 or more will be in the service for the transportation of anhydrous ammonia. These large ammonia tank cars are built in accordance with the rigid specifications of the United States Bureau of Explosives and are shipped under the regulations of the Interstate Commerce Commission. There have also been developed single-unit containers that will hold 1,000 pounds of ammonia, similar to the 2,000-pound container now being used for the transportation of liquid chlorine on the well-known multiple-unit tank car.

EFFECT ON PRICES OF INTRODUCTION OF SYNTHETIC PROCESS

The beginning in this country of the manufacture of anhydrous ammonia by the synthetic process forecast the elimination of the old method of distilling ammoniacal liquor. While this economic change was hard for those old-line companies engaged in that field, it was an economic step that they must have anticipated, and made their plans accordingly. This economic change is a very apt illustration of a reason why all those engaged in the chemical industry should be very conservative in handling their depreciation and obsolescence charges, for there is no industry known to the writer that is so continuously menaced by new discoveries.

This replacement of the old method of the manufacture of ammonia by the synthetic process was followed by a drop in the price of anhydrous ammonia to about one-third of the old prices, but the old method of selling and distributing ammonia for the refrigerating trade still maintains, with its high costs. Here we have a situation whereby it costs the manufacturer two and a half or three times as much to sell and distribute a product as it costs to produce, and a change in the selling and distributing practices must be developed.

NEW USES DUE TO REDUCTION IN PRICE

Anhydrous ammonia for the refrigerating trade in the United States calls for 30,000,000 to 35,000,000 pounds per year. This quantity is not being expanded much, mainly on account of electric and gas refrigeration, but the radical cut in the sales price of anhydrous ammonia has caused many new developments in its use, such as the manufacture of photographic films, artificial leather, imitation ivory, dyes, rayons, lacquers, etc.

With the price that now prevails for ammonia, the sulphuric-acid-industry by the oxidation of ammonia has created a new and growing outlet for its consumption, both as anhydrous and aqua, and it is also being successfully used as a substitute for the Chilean nitrates. Almost all of the ammonia for this new use is transported in tank cars and there are at present approximately 25 plants in the United States oxidizing ammonia, in the manufacture of sulphuric acid, and it is estimated that approximately 3,000,000 pounds per year are now being used for this purpose.

Another large use for ammonia is in the manufacture of soda ash, this industry alone consuming 7,000,000 to 10,000,000 pounds of ammonia per year. Virtually all of the ammonia now used in the ammonia soda process comes from by-product coke-oven plants, but the price of this ammonia liquor has reached the point where any further reduction would cause the by-product coke-oven operators to turn their ammoniacal liquor into sulphate.

Ammonia oxidation is also being extended in the nitric acid industry. In April of this year announcement was made that the first commercial installation of this kind in the United States had commenced operation, and a very large expansion of this process can be looked for in the future; in fact, it is now rapidly going forward. The explosive industry offers a great field, for when one realizes that there are used in the United States over 500,000,000 pounds of explosives per year for peace-time purposes, such as mining, quarrying, etc., and this will consume approximately 70,000,000 pounds of ammonia, one can see the possibilities of the increased ammonia consumption in this field.

It is unnecessary to call attention here to the secure position in which our country has been placed by the installations of these synthetic ammonia plants, but it may surprise many to know that by the end of the current year there should be in actual operation in the United States synthetic ammonia plants with sufficient total capacity, so that in case of a war the United States would be in a position to manufacture all of its required war explosives without the importation of one single ton of Chilean nitrates—and all without governmental assistance, which can not be said of the foreign installations.

Undoubtedly the largest future use of ammonia lies in the fertilizer industry, whereby ammonia goes into the manufacture of ammonium sulfate, ammonium phosphate, and the one ideal fertilizer that embraces in one product nitrogen, phosphoric acid, and potash. Such an ideal fertilizer is now being produced in Germany, but according to reports there seems to be some question as to its economic success; however,

time should work this out satisfactorily. The greatest need in the fertilizer field, however, is to educate its users to buy highly concentrated fertilizers and do the mixing at or near the point of consumption. In this connection it may be interesting to know that ammonia liquor is now being successfully introduced directly to the batch in the mixing pan, in the correct proportions required to neutralize the free acid in the superphosphate. In this process anhydrous ammonia can be delivered in tank cars and stored as ammonia liquor, the anhydrous ammonia being absorbed in water as it is unloaded in properly designed tanks until required for use. While special equipment is required for the conversion of anhydrous ammonia to this ammonia solution, when properly designed, inexpensive equipment is used and the operation is reported to be safe, practical, and very economical.

PROBLEM OF CHEAPER HYDROGEN

In the manufacture of synthetic ammonia the largest single cost item is that of hydrogen, and herein lies the greatest opportunity for the activities of the chemical engineer in the development of new processes toward cheaper hydrogen, coupled with less expensive methods for the purification of hydrogen that comes from water gas or from by-product coke-oven gas.

MUSCLE SHOALS

To speak of synthetic ammonia without mentioning Muscle Shoals would be like speaking of Hamlet without mentioning the ghost. Muscle Shoals is certainly a chemical ghost that is annually being pulled out of the grave by a certain class in Washington. Being one of many who were approached by the congressional Muscle Shoals inquiry committee in 1925, the writer wrote this committee a very short letter on the subject, declining even to go to the expense of a trip to Washington to discuss it. This letter contained the following suggestion:

Disregard the impractical and uneconomic propositions as regards previous negotiations, especially as regards the manufacture of fertilizers at 8 per cent above cost for the whole United States, because the cheap production of nitrates and fertilizers of the future will come from the chemistry of coal, and will in time become a geographical proposition both as to its manufacture and distribution.

Then lease the entire Muscle Shoals power proposition as a power proposition to the highest power bidder and under the most favorable terms it is possible to make, so that the returns from this war-time investment might accrue to all citizens of the United States.

This letter also suggested keeping the nitrate plant at Muscle Shoals in a stand-by condition as an insurance against future wars, but with the installations existing and being finished this will now be unnecessary and an uncalled-for expense.

If the socialistic energies of some of our Government employees must have an outlet, it might be wise to let them spend this energy in educating the farmer in the use of concentrated fertilizers as mentioned above, and above all the Government should be kept out of business, and those who are engaged in the business with millions invested be allowed to handle their own industry. Those who have millions of dollars in the industry, and who are investing millions more, prevent the necessity of having any foreign money invested in this line of business in the United States.

CHEMISTRY OUR PROTECTION AGAINST FOREIGN COMBINATIONS

Sir James Irvine has aptly said:

"Chemistry is the nemesis of every monopoly based on raw material. By reducing many forms of matter to simple elements or compounds and then fabricating by synthesis a desired substance, chemistry works for equal industrial and commercial opportunity. It is the foe of monopoly, public and private. The free interchange of scientific knowledge and theory makes it so."

The largest industrial cartel of Germany is the Interessen Gemeinschaft, with an investment according to their last balance sheet of over $430,000,000. The largest industrial combination of England is the Imperial Chemical Industries (Ltd.), with an investment of over $290,000,000, and in both of these countries these chemical cartels are almost quasi-governmental in their importance, and will in time work out an arrangement aimed at the chemical industry of the United States. Our chemical companies in this country are prohibited from adopting measures, except for export trade, to protect themselves from these foreign combinations, except by spending money to reduce costs, but the chemical industry of this country will protect itself in the United States, and at the same time secure its proper portion of the world's trade. To-day we have as thorough and as resourceful chemical engineers as there are in the world, and the continued enlarging of our present position in the chemical world, with its unlimited possibilities for the future, lies in the hands of the present and the future members of the American Chemical Society.

ECONOMIC RELATIONSHIPS BETWEEN NITROGEN AND FERTILIZERS

H. R. Bates, manager manufacturing department, International Agricultural Corporation, Atlanta, Ga.

It was about 30 years ago that the famous British scientist, Sir William Crookes, startled the world with the statement that, unless we took advantage of the inexhaustible supply of nitrogen in the air to supplement the Chilean nitrate, we would eventually face starvation. This was 125 years after the discovery of nitrogen. Little did he dream of the outcome of his prophecy. How well we heeded the warning is evidenced by our daily production of 4,500 tons of nitrogen.

Strange to say, it was not nitrogen for food but nitrogen for war which supplied the incentive for the increased production. Stranger still, the production continues to increase after that incentive has been removed. Nitrogen, the lazy, inert, colorless, tasteless, and odorless gaseous element, has, of all known elements, taken the most important position in the affairs of the world and is by far the most active in the world markets. Some one has figured that every square mile of air over the earth's surface carries 20,000,000 tons of nitrogen—enough in each square mile to last the world 12 years at the present rate of consumption—and it is free as far as its material value is concerned.

Any important changes in the production and cost are of immediate interest to statesmen, financiers, chemists, agriculturists, and manufacturers. It is absolutely indispensable to mankind in peace or war and a necessity to all animal and vegetable growth. There is hardly a problem in any branch of agricultural or industrial chemistry that does not at some point require the consideration of nitrogen.

The influence of the World War on nitrogen production was far-reaching. In 1913 we find the production as follows:

	Tons N
Chilean nitrate	429,897
By-product ammonia	319,667
Synthetic ammonia	90,491
Total	840,055

At the close of the war we find the order of production reversed, and synthetic ammonia has taken the lead, with the 1927 tonnage as follows:

	Tons N
Synthetic ammonia	700,000
Norwegian saltpeter	30,000
Cyanamide	200,000
	930,000
By-product sulphate of ammonia	370,000
Chilean nitrate	320,000
	1,620,000

From the available sources of information it would appear that the world's capacity for fixed nitrogen production is as follows:

	Synthetic	Cyanamide	By-product	Arc process
	Tons N	*Tons N*	*Tons N*	*Tons N*
Germany	450,000	114,000	100,000	----------
France	116,700	53,500	5,000	----------
England	55,000	----------	100,000	----------
United States	25,000	40,000	147,000	----------
Italy	63,700	20,000	3,500	----------
Japan	43,500	20,000	5,000	----------
Belgium	22,000	----------	10,000	----------
Spain	7,200	----------	----------	----------
Poland	3,000	30,000	----------	----------
Czechoslovakia	4,500	6,000	----------	----------
Norway	----------	15,000	----------	46,500
Russia	7,300	----------	----------	----------
Sweden	2,500	6,000	----------	----------
Rumania	----------	5,000	----------	----------
Canada	----------	60,000	5,000	----------
Switzerland	2,200	----------	----------	----------
Yugoslavia	----------	14,000	----------	----------
	802,600	383,500	375,500	46,500
Actually producing	700,000	200,000	370,000	30,000

Some idea of the remarkable growth of the synthetic industry may be noted from the increase in the production in 1909 of 1 per cent of the total fixation to 57 per cent in 1927. Surely a wonderful heritage from the chemists and engineers who solved the difficult problems and made possible the present synthetic production.

UNITED STATES PRODUCTION

In the United States we find in 1921 but 200 tons of synthetic ammonia. In 1928 we find 30,000-ton capacity with 25,000 tons production. In the United States in 1909 we find 106,500 tons of by-product ammonia. To-day we have a production of 715,000 tons of by-product ammonia, equivalent to 147,290 tons of nitrogen. About 87,550 tons were used in agriculture, 28,840 tons exported, and the balance used in other industrial operations. We, however, need not fear that there will be a shortage of fixed nitrogen; our German friends will see to that. Their own consumption is only 400,000 tons of fixed nitrogen and they are finding it quite a problem to dispose of the remainder. They plan to put part of this surplus into a synthetic nitrate in competition with Chilean nitrate. Before 1929 the United States will be producing at Hopewell, Va., synthetic nitrate of soda.

The function of the fertilizer industry is to provide properly balanced fertilizers, compounded with regard to crop requirements, the soil, and climatic conditions. Some idea of the field of this industry may be obtained when we realize that we have 924,000,000 acres for our field of operations, with 6,250,000 farms, serving 117,000,000 people with

farm products (exclusive of animal food), valued at $5,685,000,000. Serving these farms are 675 fertilizer factories.

It has been estimated that the loss of nitrogen in the United States lands under cultivation, not replaced by manure, leguminous crops, atmospheric precipitation of rain and snow, and by commercial fertilizer is between three and four million tons. To replace this would require fifteen to twenty million tons of sulfate of ammonia, or more than 100,000,000 tons of fertilizer carrying 3 per cent nitrogen per ton. Fertilizers are replacing but 6 to 8 per cent. Surely no other industry has such a possibility for future expansion, and no other country such a need for conservation and expansion of its nitrogen resources.

It is very evident the soils need nitrogen in increasing quantities to replace the soil losses. This fact alone makes the industry fundamentally sound and insures its present permanence. Future generations may exist on synthetic foods, but we will need artificial fertilizers for many years to come.

Commercial fertilizers carry two or more of the three chief elements—nitrogen, phosphorus, and potash—but calcium, iron, magnesium, manganese, sulphur, sodium, chlorine, oxygen, hydrogen, and carbon also play important parts in plant growth. The function of nitrogen in fertilizer is to promote the vegetation growth above ground, impart plumpness to cereals, and produce succulence. At the same time it acts as a regulator, to some extent, of the utilization of potash and phosphoric acid.

In 1898, when Sir William Crookes issued his chemical slogan "Nitrogen or starvation," the United States was producing and consuming about 2,000,000 tons of fertilizers. To-day we are consuming from 6,500,000 to 7,500,000 tons. There has been no substantial tonnage increase for the past 10 or 15 years, but there has been an increase in the plant-food consumption, particularly during the past five years. From 187,829 tons of nitrogen for agriculture, we have advanced to 210,092 tons, consumed in 1927 in mixed fertilizers and top dressers.

The fertilizer tonnage is divided into:

	Per cent
Mixed ammoniated fertilizers	70.6
Mixtures of potash and superphosphate	9.6
Superphosphate	10.6
Miscellaneous materials	9.2
Total	100.0

The tonnage is divided into territories as follows:

	Per cent
New England States	5.4
Middle Atlantic States	14.5
Southern States	66.2
Middle Western States	11.9
Western States	2.0
Total	100.0

DOMESTIC AND FOREIGN CONSUMPTION

While we have been making our slow progress, other countries have advanced rapidly. The following table will show the comparative consumption for agriculture for 1927 per unit of population:

	Nitrogen consumed, 1927	1927 population	Nitrogen per million population
	Tons		*Tons*
United States	210,000	118,000,000	1,770
Germany	440,000	62,400,000	7,051
France	143,000	40,600,000	3,522
England	45,000	33,678,000	1,339
Holland	46,000	7,400,000	6,750

The consumption of fertilizers in 1927 in the same countries, all figured to tons, all carrying a total of 20 per cent plant food, shows:

	Consumption	Average test		
		Nitrogen	P_2O_5	K_2O
	Tons	*Per cent*	*Per cent*	*Per cent*
United States	6,877,000	2.7	10.0	4.0
Germany	8,750,000	5.0	6.0	9.0
France	4,000,000	3.1	12.5	4.4
England	1,225,000	3.7	12.3	7.5
Holland	1,325,000	3.5	9.0	7.5

The average consumption of fertilizer per acre under cultivation shows:

	Crop land	Fertilizer
	Acres	*Lbs. per acre*
United States	391,000,000	35
Germany	49,500,000	337
France	56,200,000	142
England	14,200,000	172
Holland	5,000,000	530

From these figures it is apparent that Holland carries on the most intensive fertilization, and Germany, with one-sixth the acreage and about one-half the population, is using twice the quantity of nitrogen used by the United States. In spite of this German crop yields have been on the decline, as evidenced by the following comparison, as shown by Pridmore and Smalley in reporting their recent observations while in Europe:

Crops	Average yield		United States yield, 1927
	1909–1913	1923–1927	
	Bushels	*Bushels*	*Bushels*
Rye	29	23	11
Potatoes	202.7	190.7	113
Oats	55.3	48.3	28
Wheat	32.6	27.2	15
Barley	38.6	33.9	23

Germany's desire to consume more of its nitrogen and potash and the loss of its phosphatic supply from the Ruhr steel converters are probably responsible for the use of low phosphatic fertilizers. The crop yields point to phosphorus deficiency and possibly a waste of nitrogen and potash.

In the foreign countries formerly using broadcasting methods of fertilizer application we find now the agronomists, especially in Germany and England, coming over to the American methods of application—in the rows near the seed and at the time of planting. In the foreign countries the applications are practically all mineral, while in the United States a proportion of organic of animal and vegetable, as well as mineral, origin is used along with mineral ammonia of inorganic origin.

Our nitrogen supply can be classified into organic and inorganic, the latter sometimes termed "mineral ammonia" or "fixed nitrogen." The organic nitrogen of animal or vegetable origin is found in cottonseed meal and other seed meals, nitrogenous tankage, packing-house tankage, concentrated tankage, blood, fish, humus, garbage, wool waste, hair felt, etc. Organic nitrogen of synthetic origin is present in cyanamide, urea, and calurea. The mineral, or inorganic nitrogen, we find in nitrate of soda, sulphate of ammonia, anhydrous ammonia and ammonia liquor, calcium nitrate, Ammo-Phos, Leunasalpeter, potassium nitrate, and ammonium nitrate. To this should be added the newer compounds which at present are more chemical curiosities than practical sources of fertilizer nitrogen.

In compounding fertilizers 30 years ago it was the practice to use 60 to 70 per cent organic nitrogen and 40 to 30 per cent of mineral nitrogen. Now, we find the ratio just the reverse, and before many years we will be forced to use even less organics as the supply decreases and they become more valuable as stock feeds.

ORGANIC NITROGEN, ANIMAL AND VEGETABLE

The 6,305,775 tons of cottonseed crushed in 1927 (our Department of Agriculture states) made 2,840,000 tons of cake and meal, and but 450,000 tons of this found its way into fertilizers, 120,000 tons in mixtures, and 330,000 by direct application. The remainder, after deducting 495,000 tons exported, was used as stock feed in this country.

Packing-house tankage 25 years ago was first used as stock feed. To-day only the condemned cattle tankages are left for the fertilizer industry. The packing-house tankage production has been materially reduced by the "dry melting process," a process whereby "cracklings" instead of tankage are produced. Concentrated tankage, so-called "stick liquor," is no longer produced in any quantity. It is estimated the packing industry produces 175,000 tons of tankage, 175,000 tons of cracklings, and 4,000 tons of blood. The best estimates obtainable give 95 per cent of this material as going into stock feeds.

Fish scrap, at one time imported for fertilizer to supplement our meager production of 45,000 to 50,000 tons, is now going into stock feeds.

To-day we have left for our organic supply of animal and vegetable origin foreign and domestic nitrogenous manures, probably 150,000 tons of 8 per cent nitrogen; blood, 12,000 tons, 14 per cent nitrogen; and South American tankage, 25,000 tons, 8 per cent nitrogen; with a probable tonnage of 100,000 tons of 2.5 per cent nitrogen of such products as humus and garbage.

Waste materials of various kinds will continue to be used, but their low nitrogen restricts their use to localities near their production.

In all we might supply from the above sources, production and importation, between 45,000 and 50,000 tons of organic nitrogen, and no prospect of increasing this amount.

NITRATE OF SODA

Nitrate of soda first made its appearance in the United States in about 1830, and has up to 1925 maintained its supremacy as the most important source of mineral nitrogen. In 1925, with the world's sulphate of ammonia by-product and synthetic ammonia increasing 50,000 tons in 1926, 100,000 tons in 1927, and 300,000 tons in 1928 over 1925,

nitrate of soda lost its dominance as a controlling factor in fixing the price of the world's nitrogen.

Under the best officina operation it has been stated that $37.57 is the cost f. o. b. Chilean points. The freight to the Atlantic seaboard lands it there for $45, or $2.25 per 100 pounds, or $2.90 a unit of nitrogen. It is being offered at this price for fall delivery. Its lowest price was $1.90 per 100 pounds, or $2.45 per unit of nitrogen in the late fall of 1914, and it was selling at or about its present scale from 1907 to 1914, dropping again after the war to $2 per 100 pounds in the fall of 1921, f. o. b. Atlantic ports. The present cost may be decreased by new methods of mining and handling. Chilean authorities estimate that it might be delivered in New York for $30.56 a net ton, or $1.98 per unit of nitrogen; this on a $7.50 freight to the United States. Its lowest sales price was $38 in the fall of 1914.

Bain and Milliken, of the Department of Commerce, place the minimum delivered Atlantic seaboard cost at $35 per ton, or $2.25 per unit of nitrogen. Cyanamide and sulphate of ammonia and some of the imported German synthetic products are selling for less per unit of nitrogen delivered at interior points. Sulphate of ammonia at $44 delivered means nitrate at $33 at ports with interior freight allowed.

Representatives of the by-product ammonia producers, testifying in February, 1928, before the Interstate Commerce Commission, on ammonia rates, stated that their by-product ammonia as liquid ammonia yielded them 3.78 cents per pound of ammonia in ammonia liquor. Converting this into sulphate of ammonia, according to the British and the American nitrates commissions appointed during the war to survey the nitrogen situation, we find, using ammonia (NH_3) at 4 cents a pound:

515 pounds NH_3, at 4 cents	$20.60
1,912 pounds 60° sulphuric acid, at $9	8.60
Plant expense	3.00
Fixed charges	1.75
Total (per ton, 2,000 pounds)	33.95

Thus, it will be seen that with ammonia at 4 cents a pound, sulphate of ammonia can be produced at $1.65 a unit of nitrogen.

With liquid ammonia at 4 cents per pound of NH_3 we have nothing to fear from $30.56 Chilean nitrate, the best they hope to do and deliver in the United States. Aqua ammonia was quoted at 2¾ cents per pound last July. Chile may continue to produce, the Government may give the producers a $4,000,000 subsidy in lieu of a tax reduction, a central selling agency may be established, but in the end nitrate must follow its synthetic master.

Properly compounded fertilizer will continue to use some nitrate for its early crop-maturing value. Formerly, of our nitrate imports, 50 per cent went into agriculture, 25 per cent into chemicals, and 25 per cent into explosives. Of the 50 per cent for agricultural use, 60 per cent went into mixed fertilizers, 35 per cent was sold for direct application, and 5 per cent was sold to sulphuric-acid producers.

Unless there is a large increase in the United States fertilizer consumption, or a larger tonnage is used in top dressing, nitrate, before many years, will have to look elsewhere for its United States market.

It is interesting to note that the Chilean Government desires to place its leading industry on a competitive basis with other nitrogen products. This no doubt means that when synthetic products are made here, or are imported in sufficient quantities, Chilean nitrates will be priced to meet this competition. In fact, a bonus has already been promised to equal any price reduction of the German syndicate. But with the syndicate's prices cut for 1928–29, and no change of any importance over the previous year, there will probably be no bonus. This arrangement, however, is effective until April 30, 1929, and protects the Chilean producers on any change in the syndicate prices prior to that date. On August 14, 1928, the nitrate syndicate voided its open-selling arrangement and reverted to the old plan of centralized control.

SULPHATE OF AMMONIA

Sulphate of ammonia, or by-product ammonia in the form of sulphate of ammonia, 370,000 tons of the world's nitrogen supply, finds 147,290 tons produced in the United States, equivalent to 715,000 tons of sulphate of ammonia. In normal times this by-product ammonia is distributed: 65 per cent to fertilizers, 23 per cent to refrigeration, and 12 per cent to explosives. Its production follows closely the coke and pig-iron curves. Passing from 42,000,000 tons of coke in 1910 to 51,000,000 tons in 1925, we find all but 10 per cent of the beehive ovens have been converted to by-product ovens.

Under these conditions it is reasonable to suppose, unless there is an unforeseen demand for pig iron, that we have reached our limit in the United States of such nitrogen production, and must look to other sources and processes to supply the deficiency, or acknowledge our dependency upon other nations. At present this is our condition, but we are gradually working out of it. Japan, one of our export customers, has already developed her resources to the extent of 400,000 tons of sulphate, and no longer calls on us as she has done the past 15 years.

The present fertilizer practice and tonnage consumed will absorb about 350,000 to 400,000 tons of sulphate of ammonia, with 157,000 tons seeking export consumption in 1927; the remainder going into refrigeration and explosives.

Operator and location: Atmospheric Nitrogen Co., Syracuse, N. Y.; Mathieson Alkali Co., Niagara Falls, N. Y.; Pacific Nitrogen Corporation, Seattle, Wash.; Lazote (Inc.), Belle, W. Va.; Roessler & Hasslacher Co., Niagara Falls, N. Y.; Great Western Electro-Chemical Co., Pittsburg, Calif.

SYNTHETIC PRODUCTS

Up to the present time the synthetic production of nitrogen in the United States has gone into refrigeration, explosives, and chemical trade. The chief synthetic ammonia products of interest to the fertilizer industry are—

Sulphate of ammonia: Made by treating finely ground gypsum with synthetic ammonia and carbonic acid; the resultant sulphate liquor is evaporated, crystallized. It carries 20.6 per cent nitrogen.

Leunasaltpeter: Carrying 26 per cent nitrogen, is a double salt of nitrate of ammonia and sulphate of ammonia, with 6.5 per cent of nitric nitrogen and 19.5 per cent of ammoniacal nitrogen. This material must be used with care or its nitric nitrogen will be lost and its sulphate of ammonia cause serious caking troubles in complete fertilizers. It also becomes very hard on long storage.

Calcium nitrate: Testing 15.5 per cent nitrogen, is the result of treating limestone with nitric acid, neutralizing the excess acid, filtering, evaporating, adding 5 per cent ammonium carbonate, and drying by compressed air spray. It is very hygroscopic and is shipped in specially prepared packages. Its use in fertilizer is not satisfactory, but it will find general use as a top dresser.

Calurea: Testing 34 per cent nitrogen, with 7 per cent in the nitric form and 27 per cent in the amide form. It is also hygroscopic and its use in fertilizer will be limited. It can be used to better advantage as a top dresser.

Cyanamide ($CaCN_2$): A lime compound of cyanogen, testing 20 per cent nitrogen. Its use is very limited by its revertive action on available phosphoric acid due to the lime content of the cyanamide. It is also somewhat objectionable to handle.

Ammo-phos ($NH_4H_2PO_4$): A mixture of phosphoric acid and ammonia, producing monoammonium phosphate, testing 10 per cent nitrogen and 45 per cent available phosphoric acid. This is an excellent fertilizer material and can be used in any quantity with any other material. It is well adapted for tobacco on account of its freedom from the sulphur element. Last year (1927–28) the production is given as 55,136 tons, largely exported.

Nitrate of potash: Testing 13 per cent nitric nitrogen and 44 per cent potash, is an excellent fertilizer material, less hygroscopic than nitrate of soda. It is a good material for tobacco where chlorine is objectionable.

Urea ($CO(NH_2)_2$): Testing 46 per cent nitrogen in the amide form, is made from ammonia and carbonic acid, liquefied at high temperatures, producing a fused mass of urea and ammonium carbonate, which on distillation leaves the urea in solution. The product is too concentrated for ordinary fertilizer use. At present it carries a 35 per cent ad valorem duty and only 600 tons were imported last year.

Domestic synthetic sodium nitrate: Testing 16 per cent nitrogen, will be found on the market next spring. Samples of this product appear to be in better mechanical condition than the Chilean product. Will not have to be ground. In appearance it is like Arcadian sulphate of ammonia.

The latest statistics show that we imported in 11 months of 1927–28 the following tonnages of synthetic products, in addition to the Chilean nitrate:

	1926–27	1927–28 (11 months
	Tons	*Tons*
Sulphate of ammonia	3,470	38,931
Leunasalpeter	12,282	67,733
Calcium nitrate	18,253	23,254
Cyanamide	109,330	126,152
Urea		538

It is difficult to secure authentic figures on the United States synthetic-ammonia production; the capacities appear, however, as in the following tabular matter:

Method	Tons N	Source of H
General Chemical	10,000	Water gas.
Nitrogen Engineering Corporation	4,000	By-product of chlorine process.
Fixed Nitrogen Research Laboratories.	865	Do.
Claude	9,000	Water gas.
Fixed Nitrogen Research Laboratories.	865	By-product of sodium process.
Niagara Alkali Co	300	By-product of chlorine process.
	25,030	

The new plant of the Atmospheric Nitrogen Co., of Hopewell, Va., will be producing late this fall. Its estimated capacity has not been made public, but its nitrogen will be a very important addition to our present resources.

NITROGEN FIXATION AND THE MUSCLE SHOALS PROBLEM

Three years ago, when we were just beginning to consider seriously the fixation of nitrogen, Germany and England were exporting their surplus. France, Italy, and Japan were producing 50 per cent of their requirements, while the United States, with the largest population, had the lowest production per unit of population.

The fixation industry in the United States has certain factors which almost guarantee its permanence and expansion. The demand is here and our production short, with our population increasing one and a half millions annually. The raw materials are plentiful and cheap, power is not such an important factor as formerly, and their conversion to commercial plant foods has been successfully demonstrated by the chemists and engineers. With increasing production will naturally follow process economies, and we may soon take a place much higher in the nations' list of nitrogen producers, instead of seventh with but 1,100 tons of fixed nitrogen per million population.

No consideration of fixed nitrogen in the United States would be complete without reference to the two plants at Muscle Shoals, nitrate plant No. 1, the experimental plant to produce ammonium nitrate, never successfully operated, and plant No. 2, the cyanamide plant with 40,000 tons nitrogen annual capacity. President Coolidge rightly vetoed—by the pocket veto—any measures which would put the Government into subsidized fertilizer production in competition with its citizenship, selling power and crediting the returns to the fertilizer costs.

While Congress has been debating this proposition, we have been making rapid progress in nitrogen fixation, and to-day have a fixation capacity equal to Muscle Shoals, distributed at various points. With Hopewell coming in this fall we will probably find that the United States will have twice the tonnage of fixed nitrogen claimed for it. It would be a veritable calamity at this stage for the Government to enter similar production in such manner as has been proposed, freed from such charges as rentals, taxes, insurance, amortization, etc., expenses which must be included in private operations.

Such progress has been made in the fixed nitrogen art that the cyanamide process is no longer the leading method. Cyanamide requires 12,000 to 15,000 kilowatt-hours to fix a ton of nitrogen, while the Haber-Bosch (German) process requires but 4,000 to 5,000. With the Government plant cost on to-day's values of $21,350,000, and a 15 per cent charge for depreciation, obsolescence, etc., and $0.004 electric power, our Government experts state that cyanamide nitrogen will cost $2.31 per unit. On $0.002 power the cost will be $2.06.

The Canadian plant at Niagara Falls, Ontario, no doubt finds it difficult to meet the foreign competition. While the production is increasing, the greater part of the increase is going into other products for subsequent export. The foreign production appears ample to satisfy the demands of the United States. Therefore, the Muscle Shoals cyanamide (if and when produced), unless transformed into more acceptable combinations, would be of very little economic value.

The same Government experts intimated that it would cost $3.18 per unit of nitrogen on $0.002 power to convert the cyanamide into sulphate of ammonia. The same product as by-product sulphate of ammonia can be purchased to-day for $2.13 a unit of nitrogen delivered. Even cyanamide is being sold and delivered at $1.94 per unit of nitrogen; such has been the progress under private control. And such has been the more recent progress in the United States synthetic ammonia production that even cyanamide is no longer our cheapest unit of nitrogen.

In the face of these figures there should be no justification in operating Muscle Shoals to produce cyanamide, a process wasteful in power, producing a material limited in its consumption through its revertive action on soluble phosphoric acid, and possessing a questionable agricultural value through its toxic qualities after soil application, causing alleged inhibition of the plant growth.

Furthermore, Germany with its 450,000 tons of Haber-Bosch nitrogen, 70,000 tons of cyanamide nitrogen, 60,000 tons of by-product nitrogen, and other sources, totaling now about 600,000 tons of fixed nitrogen is, with England, France, Italy, and Japan, expanding along the synthetic ammonia process rather than through the cyanamide process. Recently Germany increased its cyanamide plant at Piesteritz, by 10 per cent, using it for phosphorus productions. At present but half the cyanamide capacity is actually producing, the increase being along synthetic ammonia processes. Surely in the face of this evidence our legislators will not fail to see the trend of the expansion and realize that electric power is too expensive for nitrogen fixation, especially when power can be sold at a good profit and its use in nitrogen fixation can not hope to compete with cheap coal.

Possibly some phosphorous process could be adopted at Muscle Shoals and, with equipment changes and proper power costs, under private control, we could utilize the present plant. But as it stands at present, as a source of cheap ammonia it is out of the picture.

Intelligent legislation, with the cooperation of the industry, and a full understanding of its economic needs, should aim to promote, not discourage, research; encourage, not throttle, progress; protect, not threaten, the very life of the industry through unwise subsidized competition with its citizenship. A strong fertilizer industry is an insurance of profitable agricultural operations in time of peace and a national asset in time of war. Costly experience has proved this fact. It would be a great misfortune to disrupt such an industry, now making such progress toward nitrogen independence, serving millions of satisfied customers with a commodity relatively lower than any agricultural supply he buys and much lower than any he sells.

We all recognize the unsound economics of producing more food when there is already an overproduction. No one suggests that the Government produce more food and cheaper food, just as it is uneconomic for the Government to suggest an overproduction of fertilizers when they are already cheap. The present industry has a capacity of at least 10,000,000 tons, and could easily extend this to 12,000,000 if the demand so required and the materials were available. Muscle Shoals only adds to the burden of an industry already suffering from overproduction.

The following balance sheet is an attempt to account for the nitrogen used, produced, and imported by the United States:

Nitrogen balance sheet for United States agriculture, 1927

PRODUCTION

Tons		Tons N
715,000	Expressed as sulphate ammonia	147,290
13,000	Synthetic ammonia	13,000
2,840,000	Cottonseed meal	163,584
350,000	Packing-house tankage	28,000
100,000	Nitrogenous tankage	7,400
45,000	Wet and dry fish scrap	2,600
153,000	Humus, garbage, rough ammoniates	5,800
	Total	367,674

EXPORTED

Tons		Tons N	Tons N	
157,000	Sulphate ammonia	32,342		
405,000	Cottonseed meal	28,512		
			60,854	

CONSUMED IN STOCK FEEDS

1,895,000	Cottonseed meal	109,152		
332,500	Packing-house tankage	26,600		
			135,752	

USED IN OTHER INDUSTRIES

138,000	Sulphate ammonia	28,428			
13,000	Synthetic ammonia	13,000			
			(A)	41,428	
					238,034
	Balance left for agriculture (B)				129,640

CONSUMPTION (STOCK FEEDS EXCLUDED)

Tons		Per cent nitrogen	Tons nitrogen
336,958	Mixed fertilizers in New England States	4	13,478
700,000	Mixed fertilizers in Middle States	2	14,000
3,870,000	Mixed fertilizers in Southern States	2.7	104,490
655,000	Mixed fertilizers in Middle West States	2	13,100
130,000	Mixed fertilizers in Western States	2	2,600
5,691,958			147,668
80,000	Sulphate ammonia top dressers	20.6	16,480
160,000	Chilean nitrate top dressers	15.5	24,800
18,300	Calcium nitrate top dressers	15.5	2,836
330,000	Cottonseed meal top dressers and mixed	5.76	19,008
6,280,258			63,124
	Consumption in agriculture		210,792
	Consumption in other industries		120,000
	Total		330,792
	Less tonnage made in U. S. and used in agriculture and other industries (A and B)		171,068
			159,724
	Shortage in United States (mineral nitrogen)		161,068

IMPORTS

Tons			
748,742	Chilean nitrate	15.5	116,053
18,300	Calcium nitrate	15.5	2,836
109,000	Cyanamide	20.6	22,434
12,000	Leunasalpeter	26	3,120
17,150	Sulphate ammonia	20.6	3,493
25,000	South American packing-house tankage	7.4	1,850
11,000	South American packing-house blood	13	1,430
36,000	Nitrogenous tankage	7.4	2,664
7,139	Ammonium chloride	27	1,927
5,600	Ammonium nitrate	35	1,960
400	Urea	46	184
	Visible nitrate stocks 7-1-26 (18,445 tons); 7-1-27 (7,130 tons)		11,315
	Miscellaneous materials		2,009
	Total		171,366

These figures indicate, even with the potential capacity at Muscle Shoals a reality, that we are still a long way from nitrogen independence, such independence as Germany was able to obtain in less than 10 years.

SYNTHETIC ANHYDROUS AMMONIA

During the past year very important work has been done which indicates that synthetic ammonia, in the form of 25 per cent ammonia liquor, can be used in mixed fertilizers in place of all or a part of sulfate of ammonia. The mineral ammonia, as usually supplied in our average 3 per cent ammonia fertilizer, can under the present formulating ratios be secured from liquid ammonia. Several thousand tons have been so made the past year, and several of the large companies are equipping their plants to take advantage of the important economy when the new Hopewell product is available.

The use of this material is limited by the acidity of the superphosphate. No gypsum is formed; curing takes place quicker and with less of the objectionable cementing. Properly handled there is no reversion of phosphoric acid, such as would occur when the same amount of lime was used. General use of this material in 6,000,000 tons of mixed fertilizers might absorb 90,000 tons of synthetic nitrogen.

MIXED FERTILIZERS

The Germans have prepared several mixtures under the trade name of "Nitrophoska," using Dorr process phosphoric acid and combinations of their synthetic compounds. About 150,000 tons were sold in Germany in 1927–28 and 3,000 tons consumed in the United States. In making the Nitrophoska the diammonium salt and potassium salts are run into a hot solution of ammonium nitrate.

In but one of the five grades have they appeared to give any consideration to the approved plant-food ratios of the United States agronomists—namely, their No. 1, 15–30–15, ratio 1–2–1. The reason is obvious. Except the 15–30–15, we can duplicate the analysis, if practical and desirable, using urea, nitrate of potash, Ammo-Phos, and Trona potash. With our domestic material we can easily produce a 12–24–12, ratio 1–2–1, a triple 4–8–4; or a 10–30–10, ratio 1–3–1, a triple 3–10–3, each standard grades.

Farmers are not accustomed to the use of these concentrated products and are slow to adopt new ideas; yet the evidence shows that the trade is absorbing a substantial tonnage. When the merits of these mixtures are better understood, and agricultural implements are designed to distribute them properly, the demand will increase from year to year.

There is an increasing production of liquid phosphoric acid abroad and in the United States. With greater production will come cheaper costs. The phosphoric acid now going into concentrated superphosphate has a potential value as a future source (combined with cheaper synthetic ammonia) of ammoniated phosphates.

The chemists of our Department of Agriculture are carrying on some very interesting work in producing various concentrated compounds of ammonia, phosphoric acid, and potash, studying their hygroscopicity, alone and in combination with other concentrated compounds. Of special interest is the treatment of ground rock with nitric oxide from synthetic ammonia in the presence of water. This produces a mixture of ammonium and calcium nitrates and phosphates, with nearly all of the phosphoric acid in dicalcic form. Also the treatment of potash, distillery waste in saturated form, with nitric oxide and subsequent neutralization with ammonia, produces a salt testing 19 per cent nitrogen and 27 per cent K_2O. So far the work has been purely scientific, with very little attention to the commercial value of the process.

FERTILIZERS OF THE FUTURE

The direct synthetic process offers greater promise of cheaper nitrogen than any other process, and new compounds will no doubt continue to appear from Germany. Recently we have heard of Nitrochalk from England, a low-grade ammonia product. Their action in combination with other materials must be acceptable to the manufacturers and soil chemists. They must remain under storage and in packages in good dry-drilling condition. Their nitrogen must be in a combination that will not damage crops, especially at the germination period.

When these combinations are made and the nitrogen-phosphoric unit costs are about the same as in regular compounds, then the production of these compounds will become of great importance to the producers and consumers.

With this increasing supply of acceptable products, already a surplus in one or two countries, radical changes in the agriculture of the United States and the rest of the world are bound to come. As the cost is lowered the marketing area will expand and eventually the standard of living of the entire world will be raised. Instead of nitrogen starvation we will have an era of nitrogen prosperity.

One of our leading scientists has stated that we may find out how bacteria annex nitrogen from the air without a catalytic agent, high pressures, or high temperatures and be able to duplicate the process.

The impossible becomes possible through creative chemistry. It may be in the future ages that nation's wealth will be measured in terms of its nitrogen production instead of its gold. At present we hear of the electric age. Perhaps the next one will be the nitrogen age.

ECONOMIC STATUS OF THE BY-PRODUCT COKING INDUSTRY WITH REFERENCE TO THE NITROGEN SITUATION

Presented under the title "By-Product Nitrogen," by C. J. Ramsburg, vice president the Koppers Co., Pittsburgh, Pa.

A study of the economic status of by-product nitrogen in its broadest aspects must involve a study of the status of the by-product coking industry. By-product nitrogen can not be isolated from the industry that is responsible for its production and upon whose prosperity its continued production depends. Therefore this paper will discuss the by-product coking industry, how it helps the country in time of war, and how it advances the cause of health and prosperity in time of peace. The past development, present position, and future prospects of by-product nitrogen can best be understood with a discussion of the by-product coking industry as a background.

DEVELOPMENT AND PRESENT MAGNITUDE OF BY-PRODUCT COKING

The by-product coking industry has reached its present economical and technical position only through unremitting scientific research and constant, aggressive application of modern technical and economic principles. The Becker oven, introduced by The Koppers Co. in 1922, is an example of the application of scientific principles to coke-oven design. The success of this oven is evidenced by the fact that there are now in operation or under construction in the United States 2,774 ovens of this type, with an annual coal carbonizing capacity of 24,450,000 tons.

The first by-product coke ovens in the United States were constructed at Syracuse, N. Y., in 1893—a battery of 12 ovens. Twenty-five years ago there were 1,956 by-product ovens in operation. They produced 1,882,394 tons of coke, or 7.4 per cent of the total coke produced in that year. The average production per oven was 962.4 tons, or at the rate of 2.64 tons per day. Modern by-product ovens have been constructed to produce nearly 25 tons of coke per day, the increase being due both to larger size of ovens and to the decreased coking time made possible by advances in design and operation. At the plant of the Carnegie Steel Co., Clairton, Pa., the largest coke plant in the world, there are 1,482 by-product ovens, producing nearly 8,000,000 tons of coke per year, or over four times the entire production of by-product coke in 1903.

During the past 15 years by-product ovens have been responsible for more and more of the total coke production. As shown in Table I, by-product coke production in 1913 amounted to 12,714,700 tons, or 27.5 per cent of the total. In 1927 the production amounted to 43,884,726 tons, or 86.2 per cent of the total. During the first six months of 1928 by-product coke has increased to 91.2 per cent. * * *

Table II is a summary of the coke industry for 1927. During that year 63,224,400 net tons of coal were charged to by-product ovens, or over 12 per cent of the bituminous coal produced.

TABLE I.—*Coke production in the United States*

Year	Beehive	By-product	Total	Per cent of total	
				Beehive	By-product
	Net tons	*Net tons*	*Net tons*		
1913	33, 584, 830	12, 714, 700	46, 299, 530	72.5	27.5
1914	23, 335, 971	11, 219, 943	34, 555, 914	67.5	32.5
1915	27, 508, 255	14, 072, 895	41, 581, 150	66.1	33.9
1916	35, 464, 224	19, 069, 361	54, 533, 585	65.0	35.0
1917	33, 167, 548	22, 439, 280	55, 606, 828	59.6	40.4
1918	30, 480, 605	25, 997, 580	56, 478, 185	54.0	46.0
1919	19, 042, 936	25, 137, 621	44, 180, 557	43.1	56.9
1920	20, 511, 092	30, 833, 951	51, 345, 043	40.0	60.0
1921	5, 538, 042	19, 749, 580	25, 287, 622	21.9	78.1
1922	8, 573, 467	28, 550, 545	37, 124, 012	23.1	76.9
1923	19, 379, 870	37, 597, 664	56, 977, 534	34.0	66.0
1924	10, 286, 037	33, 983, 568	44, 269, 605	23.2	76.8
1925	11, 354, 784	39, 912, 159	51, 266, 943	22.2	77.8
1926	12, 488, 951	44, 376, 586	56, 865, 537	22.0	78.0
1927	7, 004, 000	43, 884, 726	50, 888, 726	13.8	86.2

Table III gives the amount and value of by-products sold, and of the by-product coke produced in 1927. This impressive total, over $400,000,000, would be even higher if the products used by the producing companies, principally tar and gas, were included. In the steel plant much of the tar is used as fuel in the open hearths, etc., and could be fairly credited to the by-product coke plant. However, such figures are not included in this table.

TABLE II.—*Statistical summary of coke industry for 1927* [1]

	By-product	Beehive	Total
Coal charged into ovens, net tons	63, 234, 400	11, 047, 000	74, 281, 400
Coke produced, net tons	43, 884, 726	7, 004, 000	50, 888, 726
Screenings and breeze produced, net tons [2]	4, 137, 400	122, 500	4, 259, 900
Average yield of coke in per cent of coal charged:			
Coke	69.4	63.4	
Breeze, at plants recovering (1926)	6.6	2.8	
By-products produced:			
Gas, M cubic feet	700, 894, 799		700, 894, 799
Tar, gallons	546, 859, 205		546, 859, 205
Ammonium sulphate or equivalent, pounds	1, 434, 920, 352		1, 434, 920, 352
Crude light oil, gallons	164, 488, 233		164, 488, 233

[1] From Department of Commerce, Bureau of Mines.
[2] Screenings and breeze calculated from 1926 production figures.

ECONOMIC ADVANTAGES OF BY-PRODUCT COKING

Table IV gives the average yields per ton of coal carbonized in by-product ovens in 1927. In a beehive oven a ton of coal yields 1,300 pounds of coke and no other products. The same ton of coal in a by-product oven yields—

(a) 1,500 pounds of coke and breeze.

(b) 11.1 thousand cubic feet of gas; sufficient to supply the average domestic consumer for over four months.

(c) 8.6 gallons of tar; containing sufficient creosote for 1.6 railroad ties and pitch for 36 square feet of roof.

(d) Over 2.5 gallons of motor fuel; sufficient to give antiknock properties to 10 gallons of gasoline.

(e) Other light oil products.

(f) 22.7 pounds ammonium sulphate; sufficient to treat 0.15 acre of potatoes or 0.2 acre of cotton land.

ADVANTAGES OF BY-PRODUCT COKE OVER RAW COAL

The question is sometimes asked, "Why not use bituminous coal as such, without the expense of coking it?" The reasons are many:

1. Coke is necessary for successful blast-furnace operation.

2. The products recovered in by-product coking have more economic value than as fuel in the coal. For fuel purposes they can be replaced by cheaper materials, but for roofing and paving, wood preservatives, disinfectants, and fertilizers, explosives, and medicinal compounds readily available substitutes can not be had. For every ton of by-product coke produced, 16,000 cubic feet of gas, 33 pounds ammonium sulphate, over 12 gallons of tar, and 4 gallons of light oils are made available as raw materials for a hundred industries.

3. When used separately as fuel, the gas, tar, and coke from a ton of coal deliver more effective heat units than the coal from which they were produced will yield when used for the same purpose. Based on the thermal efficiencies reported in Government tests for coal and coke in domestic furnaces, the gas, tar, and coke from 1 ton of coal are equivalent to 1.2 tons of coal burned as such. In addition, about 24 pounds of ammonium sulphate are obtained in modern ovens.

4. Coke is a smokeless fuel. The savings, both tangible and intangible, that would result from the elimination of smoke in our urban centers are almost beyond calculation. In the East the use of anthracite has been very extensive, and for this reason the people of the eastern cities have been blessed with smokeless skies and an abundance of sunshine, with its health-giving ultraviolet rays. There has been, however, in recent years, a growing tendency to use soft coal, and the reason is not far to seek. Soft coal is cheaper, or rather it seems cheaper, to the individual home owner. He does not appreciate that the cost of laundry, cleaning, repairs to houses and public buildings, depreciation of merchandise, etc., due to smoke, amounts to probably five times the annual per capita coal bill. (Meller, Ind. Eng. Chem., 16, 1049 (1924); Mellon Institute Smoke Investigation, Bull. 4, figures corrected to 1925 basis.)

By-product coke offers a combination of economy and smokeless cities. Made from low-ash soft coal, clean to handle, easy to fire, it commends itself as the ideal solid domestic fuel. The growing recognition of the merits of by-product coke is indicated in figure 4. In 1926 over three and five-tenths times as much by-product coke was used for this purpose as in 1918.

Large by-product coke plants are in operation along the Atlantic seaboard at Boston, Providence, New York, Newark, Baltimore, and Montreal, and new plants will soon be in operation at New Haven, Brooklyn, and Philadelphia.

BY-PRODUCT COKING INDUSTRY AND NATIONAL DEFENSE

The service rendered by the by-product coking industry in normal times is more than sufficient to warrant its continued activity. But, in addition, this industry has another function that is frequently overlooked, namely, it is a potential source of a large amount of materials for munitions.

During the World War practically all by-product coke plants installed equipment to recover and partially refine light oils, with the result that, in 1918, 8,862,000 gallons of toluol and 44,805,000 gallons of benzol were recovered, in addition to 87,222,450 gallons of crude light oil. In the same year the equivalent of 174,327,000 pounds of anhydrous ammonia, or 697,308,000 pounds of ammonium sulfate, were produced in the by-product coking industry. Since benzol, toluol, and ammonia are important sources of explosives, and since coke is essential to the manufacture of steel, it is obvious that the by-product coking industry was one of the most important factors in determining the outcome of the war. The following is quoted from the Department of the Interior (Coke and By-Products in 1916 and 1917, p. 1137 (1919)):

By the fall of 1915, it was apparent that the outcome of the World War would depend fully as much upon the mobilization of industries as on the mobilization of armies and that the ability to produce steel and explosives in quantity would be the deciding factor in the struggle. The coke industry consequently sprang to the fore, as coke is essential to making iron and steel, and modern high explosives are derived principally from the residues obtained in by-product coke-oven operation.

To-day, when the demand for toluol and benzol for national defense is not pressing, the coke plants do not produce the maximum possible amount of these materials. Where the gas is sold for public distribution, these light oils are more valuable when left in the gas. However, if all the light oils were recovered from the coke-oven gas manufactured in 1927, there would have been produced 183,380,000 gallons, yielding some 25,673,000 gallons pure toluol, 99,025,000 gallons pure benzol, as well as other light-oil products.

BY-PRODUCT NITROGEN FOR MUNITIONS

The nitrogen needs of the country for explosives in war times are estimated at 144,000 net tons. In 1927 by-product coke ovens produced the equivalent of 147,800 tons of fixed nitrogen, or more than the estimated war-time requirements. If all the by-product coke ovens in the country were operated at maximum capacity—as they undoubtedly would be at the time of a national emergency—they would produce the equivalent of 190,000 tons of nitrogen. Nitrogen needs for explosives in case of war and nitrogen that could be saved by eliminating smoke by the use of by-product coke are from the Fuel, Power, Transportation Educational Foundation, while the other figures are from Government reports and calculated from by-product oven capacity.

TABLE III.—*Products sold by by-product coking industry, 1927* [1]

Product	Sales	
	Quantity	Value
Light oil and derivatives:	*Gallons*	
Crude light oil	9,265,948	$1,077,957
Benzol, crude and refined	21,193,807	4,371,519
Motor benzene	86,802,745	14,629,999
Toluol, crude and refined	11,784,984	3,999,820
Solvent naphtha	3,661,970	926,787
Other light oil products	1,393,876	147,017
Total	134,103,330	25,153,099
Naphthalene, crude pounds	7,848,224	86,078
Tar, gallons	305,898,176	16,095,478
Ammonium sulphate or equivalent, pounds	1,483,731,277	27,383,268
Gas, surplus, M cubic feet	408,389,357	70,092,168
Other products		93,791
Value of all by-products sold		138,903,882
Coke produced, net tons	43,884,726	288,322,650
Coke breeze produced, net tons [2]	4,137,400	9,131,760
Total value of coke produced and by-products sold		436,358,292

[1] Data from Department of Commerce, Bureau of Mines.
[2] Estimated from 1926 figures for breeze.

NOTE.—This includes value for by-products sold, not those used by producer or carried to stock. Total coke valued at $6.57, the reported average receipts per ton for 1927.

TABLE IV—*Average yields per ton of coal carbonized in by-product ovens in 1927* [1]

Coke	pounds	1,388
Coke breeze (1926 yield)	do	124
Tar	gallons	8.6
Ammonium sulphate or equivalent	pounds	22.7
Light oil	gallons	[2] 2.9
Gas total	M cubic feet	[3] 11.1

By-product nitrogen also has the advantage that its production is distributed among a large number of plants throughout the country.

To be economically feasible, synthetic nitrogen must be produced in a large central plant. A shutdown of this plant means the stopping of nitrogen production, which might be disastrous, whereas the loss of one by-product plant would not seriously affect nitrogen production. The uninterrupted production of by-product nitrogen in emergencies is thereby assured, while synthetic nitrogen production may be uncertain and irregular.

Industries that have an economic justification for existence in time of peace, and that, in addition, are capable of producing the means of national defense, are the best preparedness a country can have. In peace and in war the by-product coking industry serves the best interests of the Nation.

BY-PRODUCT AMMONIA

Ammonia is a by-product in the coking industry. By-product coke plants are constructed primarily for gas and coke, and in normal times operations are conducted to produce the maximum quantity and quality of these products. However, as has been pointed out above, the production of toluol and benzol in the by-product coking industry could be considerably increased if conditions warranted. The same applies to a lesser extent to by-product ammonia.

DISTRIBUTION OF NITROGEN IN COAL BY COKING OPERATION

The total nitrogen in coal ranges from 1.45 to 1.75 per cent, only a part of which is converted into ammonia by the coking operation. Table V gives roughly the distribution of nitrogen in the various products.

[1] From Department of Commerce, Bureau of Mines.
[2] Average for plants recovering.
[3] Of this amount, 4.4 M cubic feet were burned in the cooking process.

TABLE V.—*Distribution of nitrogen in by-product coking*

Nitrogen in products:	Per cent of total nitrogen in coal
As ammonia	18.0
As cyanide	1.2
As pyridine and other organic bases in tar	3.3
Free in gas	27.5
Remaining in coke	50.0
Total	100.0

The nitrogen in the cyanide, tar, and gas is lost as far as ammonia formation is concerned, while a part of that remaining in the coke might be recovered if conditions warrant. This, however, is rather difficult. The most effective method would be to treat the hot coke with steam before pushing from the oven. By slow carbonization at low temperatures, followed by steaming, the ammonia yield in a coke oven might be increased by perhaps some 50 per cent. Such operation, however, would result in decreased capacity, due to the longer time required. Under present market conditions the coke-plant operator is not warranted in going to such lengths for the results obtained.

It must be understood that the formation of ammonia is a delicate matter, and the temperature limits at which ammonia can be formed and continue stable are very narrow. The function of a coke oven is to produce first a high quality of coke, and to do this the heats must be very uniform. It is evident therefore that the problem of producing a uniformly heated wall and at the same time have a high-coking velocity while having the temperature to which the gases above the coal mass are subjected sufficiently low to protect the ammonia, benzol, and other hydrocarbons, is a complex one. Fortunately the temperature for the highest yields of gas, tar, and benzol practically coincide with the optimum temperatures for the formation and protection of ammonia. This ideal condition is secured in the Becker oven.

By the use of this oven the yield of fixed nitrogen has been largely increased in two ways:

(1) Owing to the superior systems of heating, higher yields are secured from a given coal.

(2) Owing to the even heating and larger capacity, coke of like quality and characteristics can be secured with the mixture of less low volatile coal.

It therefore follows that the Becker oven is showing largely increased yields of by-products, while producing a superior coke. The writer believes it a true statement that for a given quality of coke the Becker oven will produce 20 per cent more fixed nitrogen than any other oven in America.

MINIMUM PRODUCTION OF BY-PRODUCT AMMONIA

The lower limit of by-product ammonia production is not so flexible. It is true that hot oven tops and high flue temperatures cause decomposition of ammonia and decrease the yield. The same factors also cause decomposition of the gas and light oils, deposition of carbon, decrease in the quality of the tar, and general unsatisfactory operation. The by-product oven of to-day is designed with the special purpose of avoiding these conditions, and, in producing the maximum quality of gas, tar, and light oils and the best quality of coke, also produces a high amount of ammonia for the coals used.

The ammonia formed must be removed from the gas before it is distributed. In most plants a portion of the ammonia is removed by water washing followed by distillation of the liquor. The remainder of the ammonia is recovered from the gas directly as ammonium sulphate, by passing the gas through a "saturator" containing a bath of sulphuric acid. The ammonia-free gas passes on, while the sulphate crystals are removed, washed, and dried for shipment.

Since under normal conditions the yield of ammonia per ton of coal carbonized does not vary greatly, and since all the ammonia formed must be recovered, the quantity of by-product ammonia produced is almost directly proportional to the by-product coke produced. Regardless of market conditions for nitrogen, by-product ammonia must be produced as long as the demand for coke and gas and tar warrants the operation of by-product coke ovens. Under present conditions the amount produced per ton of coal could be increased somewhat, but could not be decreased without a deleterious effect on other and more important products.

FORMS OF BY-PRODUCT AMMONIA

By-product ammonia is generally prepared in the form of sulphate. If so desired, it could be prepared in any other form of ammonium compound. However, the sulphate is most convenient for the coke and gas plant and, since there is a potential market for much more sulphate than is sold at present, it is probable that the sulphate will continue to be the predominating form.

The merits of by-product ammonium sulphate as a component of mixed fertilizers and as a top dressing are too well known to require repetition here. It is used extensively and successfully for such highly diversified crops as cotton and potatoes, corn and wheat. Large amounts are exported from the United States to the Far East, where it is especially valuable on rice lands. As a top dressing on lawns, golf courses, and grasslands ammonium sulphate is without a peer.

TABLE VI.—*By-product ammonium sulphate production*

Year	Ammonium sulphate	Nitrogen content	Per cent of 1913 rate
	Net tons	*Net tons*	
1913	195,000	40,200	100
1914	183,000	37,700	94
1915	250,049	51,500	123
1916	288,265	59,400	148
1917	325,670	67,000	166
1918	379,278	78,100	194
1919	403,223	83,000	206
1920	499,463	102,900	256
1921	358,500	73,800	183
1922	476,761	98,200	244
1923	603,363	124,300	309
1924	569,622	117,300	292
1925	633,649	130,500	325
1926	690,967	142,300	353
1927	717,460	147,800	367
1928 (estimated)	782,100	161,100	400

FUTURE PROSPECTS OF BY-PRODUCT AMMONIA

As is shown in Table VI, the production of by-product ammonia for 1928 is estimated at four times the production in 1913. During this same period the percentage of by-product coke has increased from 27.5 per cent to 92 per cent of the total coke production. The natural growth of the steel industry, together with the widespread demonstration of the economy and efficiency of coke-oven gas as the source of base load supply for city distribution and the growing recognition of the value of coke as a smokeless fuel, will cause more by-product coke ovens to be built in the future. The rate of increase in by-product coking capacity, however, will probably be slower than it has been in the past two decades. Consequently, the rate of increase in by-product ammonia production will also be slower.

TABLE VII.—*World production of nitrogen*[1]

[Year ending May 31]

	1923–24		1924–25		1925–26		1926–27	
	Net tons	*Per cent*	*Net tons*	*Per cent*	*Net tons*	*Per cent*	*Net tons*	*Per cent*
By-product ammonia from coal	1,682,000	29.8	1,738,200	28.2	1,837,000	25.8	1,830,000	27.7
Chilean nitrate	2,157,000	32.0	1,960,000	31.8	2,129,000	29.9	1,064,000	16.1
All synthetic nitrogen	1,870,000	38.2	2,465,500	40.0	3,155,000	44.3	3,714,000	56.2
Total nitrogen	5,646,800	100.0	6,163,700	100.0	7,121,000	100.0	6,608,000	100.0
United States by-product ammonia from coal, per cent of world production of nitrogen		10.7		9.2		9.9		10.4

[1] Figures based on ammonium sulphate equivalent.

On the other hand, there is every indication of an accelerated demand for fixed nitrogen in various forms. These increased requirements must be taken care of by Chilean nitrate and by various processes for synthetic nitrogen. The percentage of fixed nitrogen supplied by by-product ammonia will gradually decrease, despite slight increases in tonnage produced. To borrow an analogy from the gas industry, by-product ammonia will supply the base load, since it is produced in fairly uniform quantities, while other processes must supply the peaks. Sound economic principles demand that by-product ammonia be sold first, at a price governed by demand and by manufacturing costs for other processes for fixed nitrogen.

Table VII shows the world production of nitrogen and the relation that the by-product ammonia of the United States bears to it. Table VIII is the distribution of nitrogen in the United States for the fertilizer year 1926–27. By-product ammonia is responsible for 47.5 per cent of the total.

TABLE VIII.—*Distribution of nitrogen in the United States, 1926–27*

[Year ending May 31]

	Nitrogen	Ammonium sulphate basis	U. S. production	World production
	Net tons	*Net tons*	*Per cent*	*Per cent*
Imports	13,200	64,100	4.5	1.0
By-product	141,800	688,400	47.5	10.4
Synthetic	18,200	88,300	6.0	1.3
Chilean nitrate	126,000	611,600	42.0	9.3
Total	299,200	1,452,400	100.0	22.0

CONCLUSION

By-product ammonia is produced by an industry that has a fixed investment of over $700,000,000, which treats 12 per cent of the bituminous coal mined in the United States and which sells annually over $400,000,000 worth of coal products. This industry produces, in

addition to ammonia, coke, an ideal smokeless fuel; gas; tar, with its hundreds of uses; motor fuel; toluol; and other light oils.

Its products, toluol, benzol, and ammonia, are indispensable for national defense and in peace times are essential articles of commerce. The industry points with pride to its war-time record. Its activities since that time have advanced the welfare of the Nation, as well as serving as an important factor in preparedness—the type of preparedness that is the best insurance against war.

The production of by-product ammonia has increased fourfold since 1913, but its growth in the future will be slower. The demand for nitrogen will increase at such a rate that by-product ammonia will not be able to maintain the percentage which it has held in recent years. Other sources must supply the increased demand.

However, because of the support of an industry of the magnitude of the by-product coking industry, with its geographical distribution throughout the country, with its progressive management, and with its other essential and valuable products, by-product ammonia will be produced as long as there is an economic justification for it.

THE INTERNATIONAL NITROGEN PROBLEM

W. S. Landis, vice president American Cyanamid Co., 535 Fifth Avenue, New York, N. Y.

A few years ago one of the early successful pioneers in nitrogen fixation presented the following formula for the guidance of amateur authors venturing into his particular field:

"First, always ascertain the total land area of the world. Next, find the maximum nitrogen applications per unit of area of the most highly cultivated garden somewhere or other, preferably in Holland or Belgium. Then multiply these two factors together, deducting present production if you find it worth while. With this final result then prepare the necessary prospectus material and advocate the immediate promotion of a dozen or more producing companies to make up the deficiency in nitrogen certain to be found."

And there have been a goodly number of followers of his advice.

Our approach to the international situation will be in a number of different directions, none of which meet the above prescription, for one must view this complicated picture from various angles if false impressions are not to be gained.

STATISTICAL

In the year ending June 30, 1928, the world's production of chemical nitrogen—that is, natural, by-product, and synthetic, and not including farm manures, city and packing-house wastes, and such like organics—was approximately 1,600,000 metric tons. The world's consumption, both technical and agricultural, of these forms of nitrogen was about 1,400,000 metric tons. Somewhat more than half of this production came from the synthetic plants, and correspondingly less than half from by-product and natural sources.

Production of natural nitrogen reached a peak during the war, and since its close has shown more or less tendency to decline, somewhat more marked during the later years. Whether it regains its former supremacy is doubtful.

By-product nitrogen has shown a general continued increase over many years, though suffering slightly from the postwar industrial depression affecting all countries. Its growth is slow, and there is little likelihood of this source speeding up production, a natural consequence of its by-product nature. On the other hand, it is a source of production that can not be displaced very easily by competitive producers.

Beginning in a small way 25 years ago the various atmospheric fixation processes have shown steady growth and now dominate the industry. The nitrogen requirements of the central empires during the war gave these processes an opportunity to show their ability to meet the emergency, and they performed their allotted task so well that contemporaneous history has more a military than an economic aspect. Were natural and by-product sources of nitrogen merely to hold present production rates, the present fixation plants completed and under construction would bring the world's production in 1930 to about 2,000,000 tons of nitrogen, rather more than less.

This great increase in production of fixed nitrogen, much of it coming into existence after the war, was not due to shortage of nitrogen and consequent increased selling prices of nitrogen products. A brief review of sulphate of ammonia prices, sulphate having become the standard of comparison since the advent of the new industry, will give a clear picture of the price trend in the industry. American prices will be used to save the trouble of evaluation of foreign units and currencies as well as to eliminate the question of depreciation moneys. These American prices not only show world trends, but are not greatly different from gold prices in international markets.

PRICE RELATIONSHIPS

The New York f. a. s. price of sulphate of ammonia in 1913 averaged approximately $3.14 per 100 pounds. After a short, unsettled period at the outbreak of the war prices rose sharply to a fantastic height in 1918 of over $7 per 100 pounds. There was again a sharp decline in 1919 to $3.50 per 100 pounds due to liquidation of war stocks of nitrogen, followed by an equally sharp rise in 1920. The collapse in 1921 of all industry dependent upon the purchasing power of farmers brought about a low price, which did not recover until the beginning of the year 1922. During the past 5-year period the average f. a. s. price of sulphate of ammonia in New York averaged $3.25 per 100 pounds in 1923; $2.40 per 100 pounds in 1924; in 1925, $2.50 per 100 pounds; in 1926, $2.50 per 100 pounds; and in 1927, $2.30 per 100 pounds. The present selling price is around $2.30 per 100 pounds f. a. s. New York. In other words, sulphate of ammonia is selling at approximately 27 per cent under the pre-war or 1913 price. There was a period in 1927 when on the international market nitrogen dropped to as low as two-thirds of its pre-war price, but only for a very short time.

All of us are aware of the present general price level of commodities (index 150, basis 1913=100). There are very few commodities in the position of nitrogen that are bringing to-day actually a lower price than pre-war. The farmer is the largest consumer of nitrogen, and a general comparison of the relative prices of farm products for the last five years may be interesting.

Average prices of farm products as indicated for years 1913 and 1923 to 1927, inclusive

Product	Unit	1913	1923	1924	1925	1926	1927
Cotton—New York spot middling.	Cents per pound	12.8	29.4	28.7	23.4	17.5	17.5
Wheat—Chicago cash No. 2 red.	Dollars per bushel	$0.986	$1.17	$1.28	$1.78	$1.54	$1.37
Corn—Chicago cash No. 3 mixed.	do	0.0614	0.81	0.956	1.006	0.73	0.85
Oats—Chicago cash	do	0.376	0.444	0.514	0.466	0.431	0.494

There is only one example in the products listed, that of cotton in December, 1926, where the price dropped below the 1913 average. In every other case farm products continuously brought a better price, for the years included in the table, than the 1913 average.

We have here pictured the international nitrogen industry as showing statistically a producing capacity in excess of demands this past year. There has been no shortage of nitrogen since the war closed, as indicated by the fall in nitrogen prices and the curtailment of production in Chile. Yet to-day there are under construction plants which, if their program as contemplated is completed, will add an average of some 200,000 metric tons of new nitrogen annually for several years to come.

That the industry has favored the farmer is shown by the relatively severe drop in nitrogen prices as compared with the price of farm crops. While the farmer is receiving substantially higher prices for his crops than the 1913 level, the nitrogen producer is asking substantially less for his products. This relative price situation, together with more active selling pressure, has caused substantial increases in consumption of nitrogen. In the five years preceding 1914 the average annual increase of nitrogen consumption was about 50,000 metric tons. In the five years 1923–24 to 1927–28 the average increase in consumption of nitrogen was not so regular, but averaged about 75,000 metric tons per year, being less than the average for the early years and slightly more in the year just passed. These figures show that the annual increase in consumption is only a small fraction of the present rate of increase in production and of new production expected within the next few years.

CHARACTER OF DEVELOPMENTS

The fixation industries, although in existence at the outbreak of the war in 1914, received their first great development during the conflict, largely through the necessities of the Central Empires, then cut off from the natural nitrates of Chile. At the close of the war there were in operative condition a dozen new fixation plants constructed during the war period, and in addition numerous partly completed plants and projects. There was probably a producing capacity of around 400,000 metric tons of nitrogen per year represented in the newly completed plants. Of this construction there is in operation to-day around 85 per cent of that original capacity, and several of the more important plants have in addition been greatly enlarged since the close of the war, and the new and old construction together is adding from 600,000 to 700,000 metric tons of nitrogen per year to the world's supply of this important commodity. A small percentage of the capacity of these war plants is not producing to-day. Only a few of the smaller war-time projects or uncompleted plants have been abandoned and scrapped.

Most of these plants were built with more or less governmental financial assistance. As governmental plants of enemy ownership, several passed into other hands in the new alignment of territory, and for small considerations. With general depreciation of currency in Europe following the war, it is very difficult to-day to determine the real capital investment now in them on a gold basis and proper capital charges applicable to operation.

Further, after the close of the war nearly every European nation undertook an active program of military preparedness, nitrogen being one of the first items to come under consideration. By-product sources were too uncertain and inadequate and Chile was too far away. A program of new construction, in part private, but mostly with some form of governmental assistance, guaranty, or such, underlies the present construction, which, as we have said above, will, if completed,

add to the world's supply of nitrogen for some years to come several times any ordinary anticipated increase in consumption.

Aside from the military aspect is the question of food supply. A large part of the world lying east of the meridian of Greenwich is undoubtedly underfed. Limited resources are left for food after the costs of the war are met requiring that food prices be kept to a minimum to insure domestic peace. In the writer's opinion too much weight has been placed on the relationship of nitrogen to food supply where military necessity was dictating the policy, for nitrogen is only one of a number of factors in growing crops.

Emphasis was also laid on the assistance the nitrogen industry would be in creating a balance of trade. With the air free to all and with several successful processes, it was easy to create a domestic picture showing that nitrogen could be produced without the necessity of importation. Directly this should eliminate imports of nitrogen, possibly also of food, at least in part, and give a possibility of export of a wholly domestically produced commodity.

With all these facts before the politician, there was ample background for his advocating the operation of the many war-time and the establishment of the many new programs now facing the industry. The relationship of supply and demand had no consideration in many of the new construction programs. The relationship of selling price to cost of production has nothing to do with operation of certain of the plants. Military preparedness is a formula that overcomes such little obstacles, and a trained operating crew in a proved plant is considered far more important than a profit or dividend.

The fixation industry itself is not ignorant of the present situation, and is doing what it can to find increased markets for the present and prospective surplus nitrogen. The present period of overdevelopment will probably reach its peak in a comparatively short time, for while other countries are still giving consideration to new fixation projects, the scale of these newer undertakings is comparatively small and the effect of their completion will not be of major importance.

Although we have shown that there is surplus productive capacity of nitrogen, it must not be understood that this surplus is uniformly distributed over all nitrogen compounds. Practically the whole of this surplus is represented in sulfate of ammonia. Fluctuations of production in Chile have taken care of nitrate.

It might be interesting to recall that it was only 30 years ago that Sir William Crookes predicted that before 1931 the chemist would have to come to the rescue of a starving world through development of a new source of nitrogen. The chemist has performed so well that there is a surplus of productive capacity in existence to-day, the domination of the industry has been taken from the natural nitrate producers, and prices on nitrogen compounds have been reduced materially below the general price level of to-day. The plea of Sir William Crookes was certainly taken seriously, if present history is an indication.

POLITICAL TRENDS

Programs of fixation development based upon military necessity naturally run counter to any attempt to monopolize nitrogen production in any one country. The many small and uneconomical plants built under such a motive in the various European countries may not represent a broad, sound economic policy, but we must face the fact that that is what is going on. Certain of the larger producers in Europe have publicly condemned the restrictions imposed by some of the smaller countries to protect the domestic nitrogen industry. Whether logical or illogical, these restrictions do exist and affect the international industry to a greater or lesser extent.

CORRECTIVE MEASURES

Constructive programs of increasing local consumption have been undertaken by certain of the more important producers. Prices have been lowered to the extreme to encourage the use of nitrogen. A most extensive propaganda has been undertaken. Various other means have been adopted or proposed to improve the purchasing power of the farmer. For example, in one European country a serious proposal has been made to lend the skill and experience of the staff of a very large corporation to assist in solving one of the marketing problems of the farmer—the realization of a higher percentage of the price which the consumer pays for the products of the farm. The proposal was based upon the assumption that the industry had available in its staff a larger amount of skill and experience than the average individual farmer could afford, and that such a staff might increase the returns to the farmer by its better experience and knowledge of the most advantageous markets, of transportation, storage, and handling of the farm products. It should be remembered that this proposal was advanced as offering assistance only in a single country, where farm production was less than the country's food consumption and where the problem of effective selling was of first importance. It is a rather novel idea to us on this side of the ocean, where the farm problem is complicated by surplus of productive capacity, which brings into play many factors other than merely skillful salesmanship. We should, therefore, not be too quick to condemn the proposal before it has really been tried out in a country where conditions are the opposite of ours, and where there are no legal obstacles to prevent such cooperation. In the country in which it has been proposed the results of its actual trial are being awaited with a great deal of interest.

NEW PRODUCTS

The more important of the European nitrogen producers have endeavored to promote the use of nitrogen by the production of new fertilizer materials. Thus we have the new nitrate of lime containing the same percentages of nitrogen as the natural nitrate; Nitro-Chalk, a mixture of ammonium nitrate and calcium carbonate; the various forms of nitrophoska, containing the three important plant foods—nitrogen, phosphoric acid, and potash. The producers in both France and Italy have interested themselves in nitrogen-phosphate compounds, but have not yet announced the particular product they ultimately expect to produce. Ammo-Phos, our American contribution to this type of fixed nitrogen compound, is now 14 years old. It is hoped to increase consumption materially through the use of these compounded fertilizers, which have as a basis the old established American fertilizer practice of furnishing the farmer a single material containing the three important plant foods. For years Europe condemned this practice, only to recognize its merits finally and adopt the better of its practice.

THE UNITED STATES

Just a word on the relationship of America to the international situation. We used this past year something over 250,000 metric tons of chemical nitrogen, most of which went into agriculture. Before the war the consumption of fertilizers increased about 10 per cent per year and nitrogen probably a little faster than general fertilizer consumption. At the close of the war the sharp deflation of agriculture caused fertilizer sales to drop sharply and at the present time we are just about catching up to our pre-war level. In this respect America is behind the world in increase in nitrogen consumption. On the other hand, American farm conditions differ from those in Europe. When Europe doubles nitrogen consumption it imports less food. If we double nitrogen consumption, we produce greater surpluses, with lower prices, unless we change our methods of farming and of marketing of farm products.

We have in the United States about six times the cultivated area of Germany, on which we use only a little more than half as much nitrogen as the German farmer. In spite of this the writer does not expect a sudden and great revolution in nitrogen consumption here, although in this view he differs from some of the foreign producers who look with longing eyes upon the vast American acreage which they think should be fertilized with nitrogen at Belgium rates of application. They have not studied in detail the peculiar American agricultural conditions. As a consequence the American nitrogen industry offers possibilities only to producers of certain classes of nitrogen compounds adapted to our agricultural needs and which must be sold relatively cheaply for our level of farm prices is lower than that in Europe, at least to the extent of the freight and handling charges.

CONCLUSION

There is, therefore, no likelihood of the world starving to death because of lack of nitrogen; the starving is more likely to be on the part of the higher cost nitrogen producers, who can not sell their products at a profit in an oversupplied market. There will be a gradual diversion of fixed nitrogen from those products which are in oversupply, to others for which the industry has already found a place or is rapidly making a place, and with the inevitable increase in nitrogen consumption this will ultimately take care of our present capacity of production in this basic industry. Those of us in the industry who will have consolidated our position and conservatively planned our future to take care of the next years look forward hopefully to a healthy and serviceable future.

RESTRICTION OF IMMIGRATION

Mr. REED of Pennsylvania. Mr. President, I send to the desk and ask to have read a resolution adopted by the American Legion of the State of Illinois on the subject of immigration.

The VICE PRESIDENT. The clerk will read, as requested.

The Chief Clerk read as follows:

Resolution passed by American Legion, Department of Illinois, September 11, 1928, at its convention in Waukegan, Ill.

Whereas the American Legion in its national conventions assembled has four times indorsed the immigration law of 1924, of which the national origin provision is the crucial feature; and

Whereas the convention of the Illinois Department of the American Legion in 1927 passed a resolution in which it declared that it "does hereby reaffirm its support on the immigration act of 1924 and of its fundamental national origin provision that immigrant quotas should be based on the entire population and not on the foreign born only"; and

Whereas a determined attack will be made by alien blocs at the next session of Congress on the national origin provision as the first step in an attack on all immigration restriction: Now, therefore, be it

Resolved, That we believe in immigration restriction as necessary to maintain the unity and safety of our country and that in order to maintain restriction immigration quotas should be on a fair and impartial basis, discriminating for and against nobody. Accordingly, we

favor the maintenance of the national origins system, basing quotas on the entire population—native and foreign born alike—and strongly oppose quotas based on the 1890 foreign born because that system excludes from the basis of determination all the descendants of the soldiers of the Revolutionary War, all the Civil War Veterans and their descendants—in short, all native-born Americans—and all immigrants who came after 1890, and is so grossly discriminatory that if continued it will throw all immigration restriction into disrepute. We oppose also attempts by alien blocs to mangle or repeal the national origins provision in order to obtain unfair quotas for their native countries.

Mr. KING. Mr. President, I would like to ask the Senator from Pennsylvania if he understands that the resolution is aimed at Mr. Hoover, who, as I understand, opposed the national origins provision, and whether he understands that it includes Mr. Hoover in the category of alien blocs who are seeking to mangle and emasculate the provisions of the law.

Mr. REED of Pennsylvania. I am not sure whether it is aimed at Mr. Hoover or at Mr. Smith, who opposed all restriction based on anything but the foreign born of 1920.

Mr. KING. I think, if the Senator from Pennsylvania will pardon me, that he misinterprets the attitude of Mr. Smith. However, my question was not directed at Mr. Smith. He is not in the limelight at present, but Mr. Hoover is.

Mr. REED of Pennsylvania. I fancy the resolution is directed at anybody who tries to weaken the present immigration policy of the Nation.

Mr. HARRISON. Mr. President, may I ask the Senator from Pennsylvania what is the status now of the national origins act? I understand it has been reported that it could not be put into operation through the three Secretaries, namely, the Secretary of State, the Secretary of Commerce, and the Secretary of Labor; but they reported that they could not put it into effect.

Mr. REED of Pennsylvania. The status of it is that under the present law, if no action is taken by Congress, the national-origins method will go into effect on the 1st day of next July. The three Secretaries to whom was intrusted the duty of making up the quotas rendered two conflicting reports. In their first report they sent in the quotas, saying that further study would not materially modify it. Then came a message announcing another draft of the same letter of transmittal, in which the opinion was expressed that the quotas were too vague for satisfactory use.

Subsequently the experts from the Bureau of the Census, upon whom devolved all the actual labor of the preparation of the quotas, have appeared before our committee and have testified to us, as well as to the House committee, that those quotas are made up with a high degree of accuracy and that they have confidence in them. That is the present status of the matter.

Mr. HARRISON. Then is it the opinion of the Senator that the national origins provision will be put into effect on the 1st of July and that no movement will be set on foot to postpone it further?

Mr. REED of Pennsylvania. I sincerely hope that it will go into effect on the 1st of next July.

Mr. JOHNSON. That is not a complete answer, in my opinion, if the Senator will pardon me, to the query of the Senator from Mississippi. Pending before the Immigration Committee are bills for the repeal of the national origins clause, and upon those bills there have been various hearings.

Mr. REED of Pennsylvania. Oh, yes.

Mr. ROBINSON of Arkansas. But the taking effect of the national origins clause has already been postponed twice, has it not?

Mr. REED of Pennsylvania. That is correct.

Mr. ROBINSON of Arkansas. It should have taken effect on July 1, 1927, but then by action of Congress it was postponed until July 1, 1929.

Mr. REED of Pennsylvania. That is correct.

Mr. ROBINSON of Arkansas. And are proposals pending again to postpone it?

Mr. REED of Pennsylvania. To repeal it entirely, but the census officials have testified that the final figures they have given us are reliable and accurate. Therefore I expect to oppose any effort to postpone or to repeal the law.

Mr. BARKLEY. Mr. President, will the Senator yield to me?

Mr. REED of Pennsylvania. I yield.

Mr. BARKLEY. In his speech of acceptance last summer at Palo Alto the Republican candidate for President declared himself in favor of the repeal of the national origins provision of the immigration law. Does the Senator know whether the incoming President intends to push his opposition to that provision of the present law and ask for its repeal by the incoming Congress?

Mr. REED of Pennsylvania. I do not know what he expects to do, but at the present time we have the votes on the subject and he has not, and, so far as my vote goes, I shall be opposed to any change.

Mr. HARRISON. And that notwithstanding the fact that the incoming President might recommend a change in his first message to Congress?

Mr. REED of Pennsylvania. Quite so. He speaks for himself, and I shall continue to try to speak for myself.

Mr. HEFLIN. Mr. President, I heard the statement made repeatedly during the recent campaign that the change in the immigration law sought by gentlemen, especially from the East, would bring into our country from about 450,000 to 475,000 immigrants in a year. I wish to put Senators on notice that we have got to watch this situation very closely. There will be efforts made at this session and in the session to follow to change the immigration law. Such proposals will look very mild on their face, but they will have devilment in them. So we have to guard the situation very carefully. I am going to oppose any change in the immigration law except to make it a little tighter. If I had it in my power, I would exclude all immigrants for five years and let this country take stock and see who is who in America.

There are being smuggled into the United States every year through New York thousands and tens of thousands of foreigners who are never accounted for. The situation is becoming alarming. They are being smuggled into this country from Canada and from Mexico. Jefferson gave us warning while we were preparing an army and a navy against an invading army, that we had better guard well our gates against a silent immigrant army.

There are certain groups in the United States who do not want any immigration restriction at all. Their action is for the purpose of bringing in people to swell particular groups, to increase their number and political power in the United States. Those of us who cherish this country and its free institutions and want to keep it soundly American have got to guard our immigration gates. I warn all Senators to be on guard, and I, myself, am going to try to keep on guard to prevent suggested changes being put into the immigration law.

Mr. SHIPSTEAD. Mr. President, in view of the fact that I have a bill pending before the Immigration Committee providing for the repeal of the national origins clause, I wish to say that a great many misrepresentations have been made, undoubtedly in good faith and innocently, about the provisions and effect of that clause. It has been charged that it is an attempt to increase immigration quotas into the United States from Europe and other parts of the world. As a matter of fact it proposes nothing of the kind and has nothing to do with increasing or decreasing the number of immigrants who can come to the United States. It has nothing to do with any part of the immigration act, except that the movement to repeal is based on the report of the three members of the Cabinet who, under the law, were asked to investigate the national origin of the population of the United States.

In their final report that commission of three Cabinet officers stated that the data available upon which to base new quotas under the national origins provision of the immigration act of 1924 were so unreliable that they refused to assume any responsibility for the correctness or the fairness of quotas based upon such data. Later Doctor Hill came with another proposition and appeared before the Immigration Committee of the Senate. I think the committee was unanimous, or practically unanimous, in agreeing that the data were so unreliable that it should refuse to take the responsibility of having the national origins clause of the law of 1924 become effective, and I believe the committee unanimously recommended to the Senate the passage of a resolution for its postponement.

The President elect was a member of the commission of three Cabinet officers who signed that report. Evidently he has not changed his mind.

I wanted to make that statement in justice to those who have studied the national origins provision and who have found it absolutely unworkable. In principle it may be all right, but it is certainly more discriminatory and unreliable than any other provision upon which quotas have been based so far.

Of course, a restrictive policy of immigration will discriminate against some nationalities, but at least quotas based upon 2 per cent of the foreign born in 1890 are capable of definite ascertainment; we know what the figures are, and there can be no quarrel about the quota which may be allotted to each country. Under the national origins clause, however, the question can not be determined unless by some arbitrary means the

quotas are picked out of the air. I think it is only fair to make that statement.

Mr. ROBINSON of Arkansas. Mr. President, will the Senator yield?

Mr. SHIPSTEAD. Yes.

Mr. ROBINSON of Arkansas. My recollection of the report of the committee to which the Senator has referred is that for last year if the national origins clause had been in effect 150,000 would be the total quota plus 3,000, the number allowed to come in under the provision respecting the minimum number which is authorized for each nationality, that number being 100. So the total number that would have been admitted under the national origins clause would have been 153,000, whereas the total number admitted under the present law was 164,000. The real difference between the two provisions, however, is that the national origins clause would have the effect of readjusting the quotas of certain nationalities, giving more to some and less to others than are admitted under the provision now in force. The provision now in force is based on 2 per cent of the number of a given nationality in the United States in 1890, whereas the national origins clause takes into consideration the whole race stock in the United States at a given time, say, 1920; but the number that would be admitted under the national origins clause would be actually less by about 11,000 than under the provisions now in force. That is my recollection.

Mr. REED of Pennsylvania. Mr. President, if the Senator from Minnesota will yield, I should like to say a word further.

Mr. SHIPSTEAD. In just a moment I will yield the floor. The repeal of the national origins clause would leave the immigration law of 1924 operating as it is operating now; it would leave the present quotas continue as they are now.

Mr. REED of Pennsylvania. I have the figures before me and they confirm the statement of the Senator from Arkansas.

Mr. ROBINSON of Arkansas. I was speaking from memory, and attempted to speak merely with approximate accuracy.

Mr. REED of Pennsylvania. The Senator's memory is very accurate, because under the 1890 basis, which is now temporarily in effect, the number admitted under the quota is 164,667 persons, while on the 1st of next July, if we can preserve the law from any change, the enforcement of the national origins provision will reduce that number to 153,685, a reduction of more than 11,000 in the quotas.

The reason for the agitation against the national origins plan is that it cuts down the quotas of certain groups who are now receiving far more than they are entitled to. I can give the figures. At the present time Germany has a quota of 51,227, or nearly one-third of all of the quota immigration into the United States. As a matter of fact, according to the census of 1920, the proportion of persons in this country of German origin was only 16.21 per cent. So they are getting almost one-third of all the immigration, whereas the persons of German origin in the United States are less than one-sixth. Obviously, they do not want to see the national origins provision go into effect. That is why I think the Steuben Society has been so active in its agitation against the national-origins provision.

Mr. ROBINSON of Arkansas. Mr. President, there is another phase of this subject, if the Senator will permit me to interrupt him, which I should like to have him discuss. I recall that under the operations of the present law complaint has been made that families have been separated and hardships have resulted because of that fact. I also recall that much has been said and provisions have been incorporated in both of the platforms of the major political parties contemplating relief from this hardship. I should like to have the Senator discuss that subject for just a moment, and explain what hardships have resulted, or illustrate them, and how the situation can be remedied without greatly increasing the number of immigrants.

Mr. REED of Pennsylvania. I will be very glad to do that, if the Senator will permit me first before coming to the Senator's question to give the figures and to answer a suggestion made by the Senator from Minnesota. I will be very brief.

Mr. ROBINSON of Arkansas. Certainly.

Mr. REED of Pennsylvania. Another group which has very much resented the national origins provision is that group which owes a part of its allegiance to the Irish Free State. At present they have about one-sixth of all of the immigration under the quotas into the United States, the Irish Free State quota being 28,567.

That comes from a country whose total population is only about 4,000,000. Almost 1 per cent of the entire Irish nation can emigrate to the United States each year under the present temporary 1890 basis; but as a matter of fact the proportion of Irish blood in the whole American Nation, counting us all, native born and foreign born alike, is only 11⅛ per cent; so their quota would be cut down by national origins to 17,000. Obviously, they do not want that; and that is the explanation of the activity of that group against the national-origins plan.

Then there is a third group, and that is the Scandinavian countries. Norway and Sweden have at present quotas of 6,453 and 9,561, respectively, whereas if their quotas were based on their actual proportion of the blood of all the United States those quotas would be reduced to 2,403 and 3,999, respectively, or a reduction of more than half in each of them; and that explains their agitation.

I have not yet heard anybody suggest a fairer scheme. All of these temporary expedients have been based on the easily obtainable figure of the foreign born in the United States at a particular moment. The temporary law of 1921 fixed the quota at 3 per cent of the foreign born in 1910, ignoring everybody born in this country in the calculation of the quota. The present law, with its temporary basis, fixes the quota at 2 per cent of the foreign born in 1890; in other words, saying that we will determine the composition of our future citizenship not by looking to the blood that made America and saved America in its repeated wars but by taking account only of foreign-born aliens and naturalized citizens, both, in apportioning the future quotas.

If some recently arrived alien who is not yet naturalized has a right to have his blood reflected in the quotas of our immigration, I say that we whose ancestors made this country and fought for it in every war have at least an equal right with that recently arrived, unnaturalized immigrant; and that is all that national origins does—to take us all into account, native and foreign born, citizen and alien, all of us alike, and base the quotas on the blood of the whole population that was in America at the latest available census, that of 1920.

Mr. SHIPSTEAD. Mr. President——

The VICE PRESIDENT. Does the Senator from Pennsylvania yield to the Senator from Minnesota?

Mr. REED of Pennsylvania. I do.

Mr. SHIPSTEAD. The national origins law provides for basing the quota, for instance, of England, so far as it can be determined, on those whose ancestors came from England, and the quota of Ireland on those whose ancestors came from Ireland, and so forth. The Senator is familiar with the work of his committee. The Senator is familiar with the hearings that have been held before the Immigration Committee. Does the Senator base his argument on all the evidence available to date or is there some new evidence?

Mr. REED of Pennsylvania. There is new evidence, and I am not sure that the Senator has heard it. I am about to quote it.

Mr. McKELLAR. Mr. President——

Mr. REED of Pennsylvania. Will the Senator indulge me just a minute?

Mr. McKELLAR. I simply want to ask the Senator whether he has tables showing the numbers that come in under the present arrangement and those that will come in under the national-origins system?

Mr. REED of Pennsylvania. Yes, Mr. President.

Mr. McKELLAR. Will the Senator put those tables in the RECORD as a part of his remarks?

Mr. REED of Pennsylvania. I shall be glad to put them in the RECORD.

I desire to qualify one statement I made, and that was that the national-origins plan was based upon the origins of all of us. That is not literally so in this respect: We have excluded the descendents of those who came to the United States as slaves. It is not necessary to have any African quota; and, consequently, the law directs the exclusion of the negro element of the United States, and, for obvious reasons, the dscendents of the aboriginal inhabitants of the United States. With those exceptions, I believe it is fair to say that it comprehends all of us.

Mr. BORAH. Mr. President——

The VICE PRESIDENT. Does the Senator from Pennsylvania yield to the Senator from Idaho?

Mr. REED of Pennsylvania. I do.

Mr. BORAH. The Senator gave figures showing what would be the decreases of certain groups. Has he the figures showing what groups would be increased?

Mr. REED of Pennsylvania. I have; and I will put the whole table in the RECORD. The most important increase would be that of Great Britain, including Wales and Northern Ireland, whose quota would be raised from 34,007 to 65,894, because it is computed by the Census Bureau that the British stock in the United States constitutes 42.89 per cent of the blood of the country.

Mr. WALSH of Montana. Mr. President——

The VICE PRESIDENT. Does the Senator from Pennsylvania yield to the Senator from Montana?

Mr. REED of Pennsylvania. I do.

Mr. WALSH of Montana. I should like to inquire of the Senator whether Great Britain meets its quota annually?

Mr. REED of Pennsylvania. Yes; it has up to the present time, Mr. President. I will put those figures in the RECORD also. I may say that all of the quotas are exhausted, and there is a great flood of applications for quota visas from every country, with the exception of a few of the smaller political units and the countries of the Far East, whose quota is only nominal. For example, there is a Japanese quota of 100; there is a Chinese quota of 100; there is an Abyssinian quota of 100; but nobody can get a visa within that quota unless he can show that he is of Aryan descent; and the consequence is that there is no demand for those little odd quotas.

When this matter was sent to be studied by the commission created under the act, three Cabinet officers were given charge of the determination of these quotas, with instructions that they were to use the Census Bureau in making them up. On January 3, 1927, they made their report to the President, and he sent their report to Congress. It was an ordinary letter of transmittal, but it has a curious history. It occurs in three different forms, all dated January 3, 1927.

The first version of it will be found in Senate Document No. 190, Sixty-ninth Congress, second session. That is the letter of transmittal to the President, dated January 3, 1927. It concludes with this statement:

> The report of the subcommittee is self-explanatory, and, while it is stated to be a preliminary report, yet it is believed that further investigation will not substantially alter the conclusions arrived at.
>
> It may be stated that the statistical and historical information available from which these computations were made is not entirely satisfactory. Assuming, however, that the issuance of the proclamation provided for in paragraph (3), section 11, of said act is mandatory and that Congress will neither repeal nor amend said act on or before April 1, 1927, the attached list shows substantially the quota allotments for use in said proclamation.

Then in Senate Document No. 190, the same document, appears also the second version of that letter, bearing the same date, addressed to the President, signed by the same Cabinet officers; and the sentence I read first reads in this way:

> The report of the subcommittee is self-explanatory and is stated to be a preliminary report, yet, in the judgment of that committee, further

That is, throwing the judgment back to the Census Bureau—

> further investigation will not substantially alter this presentation.

Then in the same Senate document is printed also the third version of this letter, which came to Congress from the President a few days later, saying that the first versions were inaccurate; and the third version said, in the same sentence:

> The report of the subcommittee is self-explanatory and is stated to be a preliminary report; yet, in the judgment of that committee, further investigation will not substantially alter this presentation.
>
> Although this is the best information we have been able to secure, we wish to call attention to the reservations made by the committee and to state that in our opinion the statistical and historical information available raises grave doubts as to the whole value of these computations as a basis for the purposes intended. We, therefore, can not assume responsibility for such conclusions under these circumstances.

Leaving Congress with the inevitable understanding that these three Secretaries had three different views on this most important question on that fateful day of January 3, 1927.

That being the state of mind of the Secretaries, the Immigration Committee, having before it these bills, sent for the real experts; and they got in Dr. Joseph A. Hill, of the Census Bureau, who is the chief statistician and the most experienced expert in that bureau. This is what he said:

He was asked:

> What, in your opinion, is the fairest way to all of the nationalities involved of calculating the distribution of the aggregate quota of immigration that Congress sees fit to admit?

Doctor Hill answered:

> I will say * * * that no proposition has been brought to my attention that seems to me fairer than this one of national origin. There seems, indeed, to me to be a rather marked absence of alternative proposals, except the 1890 basis, that is about the only alternative I have had brought to my attention as against the national-origin plan.

Then he was asked as to the accuracy of the 1890 basis. He was asked this question:

> Does the distribution of quotas based on the 1890 census reflect with any accuracy the proportion of nationalities that now exists in the United States?

Mr. Hill answered:

> No, indeed; it does not.
>
> It gives the German quota, for example, 51,000 out of a total of 164,000. Is the German element in the American population 51 to 164, namely, 31 per cent?

He answered:

> No, sir; it is not. I do not see how anyone could be surprised at the fact—

And so forth.

Mr. EDGE. Mr. President——

The VICE PRESIDENT. Does the Senator from Pennsylvania yield to the Senator from New Jersey?

Mr. REED of Pennsylvania. I do.

Mr. EDGE. Does the Senator believe that using the 1890 census as a basis reflects the actual number of residents of the different nationalities as compared with using the 1920 census as a basis?

Mr. REED of Pennsylvania. It comes closer to the true facts than the 1920 census. If we based it on the 1920 census, it would give Poland a bigger quota than it would give all of Great Britain, for example. That would be the result of basing it on the foreign-born only in 1920.

The point I want to make is that the currents of immigration have changed in the various decades, and for any moment that we might select, if we based our quota on the foreign born at that moment, it would reflect only the recent arrivals and not those who came in the previous decades.

Mr. EDGE. Exactly, but it will reflect the actual population of the country at the time. As a result, from the standpoint of actual population, is it not true that using the 1920 census would better reflect the foreigners who have been admitted to the country and who are here now?

Mr. REED of Pennsylvania. Absolutely. If we based it on the foreign born here in 1920 it would reflect the present-day group of foreign born better than the 1890 census; yes. But I have never heard anyone answer my question, why we native-born Americans should not have an equal right to be represented in the immigration quotas, and there is no way of doing that except by this national origins method.

I am not going to take the time of the Senate to read now the long testimony given by Doctor Hill at the hearing, but it is printed as a committee document, and at the conclusion of my remarks I will ask to have it printed in the RECORD. It shows, I think, beyond a doubt, that the national origins method is essentially fair and is the only essentially fair method.

Mr. SHIPSTEAD. Mr. President, will the Senator yield?

Mr. REED of Pennsylvania. I yield.

Mr. SHIPSTEAD. The Senator was asked to read the names of the countries that would have their immigration quotas increased by the national origins law. Will the Senator please continue to read those?

Mr. REED of Pennsylvania. Yes; I will be glad to. It increases the quotas of Belgium, of the Netherlands, of Austria. It decreases that of Czechoslovakia.

Mr. SHIPSTEAD. Increases it?

Mr. REED of Pennsylvania. It decreases that of Czechoslovakia.

Mr. SHIPSTEAD. The national origins law?

Mr. REED of Pennsylvania. Yes.

Mr. SHIPSTEAD. Under the present law Czechoslovakia has——

Mr. REED of Pennsylvania. Three thousand and seventy-three is the present quota, and under the national origins law they will have 2,726. It increases the quota of Finland by less than a hundred. It increases that of Greece to a total of 312. That would be her whole quota. It increases the quota of Hungary slightly, of Italy slightly, of Lithuania slightly, of Poland about a hundred. It decreases the quota of Portugal. It decreases that of Rumania, and considerably increases that of Russia.

Mr. ROBINSON of Arkansas. Russia has no quota.

Mr. SHIPSTEAD. It increases the quota of Russia by more than 200 per cent.

Mr. REED of Pennsylvania. I beg the Senator's pardon. It increases from 2,248 to 3,540.

Mr. ROBINSON of Arkansas. Has Russia a quota now?

Mr. REED of Pennsylvania. Yes; they have a quota now. Of course, you can not get a passport, and we would not recognize one if it were presented, but League of Nations passports are presented by people born in Russia, and they are charged to

that quota. There is a very slight increase in the quota of Yugoslavia, about 70 persons. Those are the countries whose quotas are increased.

Mr. FLETCHER. Mr. President, as I understand it, the national-origins basis will go into effect July 1 next year, unless there is another joint resolution extending that time.

Mr. REED of Pennsylvania. Yes, Mr. President.

Mr. ROBINSON of Arkansas. Or unless it is repealed.

Mr. REED of Pennsylvania. Or unless it is repealed. The only criticism that I have ever heard of the national-origins method was not on the fairness of the idea but on the possible inaccuracy of the computation. If anyone will take the time to read through Doctor Hill's statement of the method of computation he will realize that there were four parts in that computation: First, the distribution in the last census of those born abroad. That is easy. That is perfectly set forth in the census itself and involves no uncertainty.

Next, the descendants of the first generation from those born abroad. That also is carried in the census figure and involves no uncertainty.

Next, the immigration between 1790, when we took our first census, and the arrival of the parents of these children of foreign-born parents who were in the census. We have accurate immigration figures from 1820 down to date. There is involved a slight element of estimate in the ascertainment of the immigration between 1790 and 1820. But the number was limited to a comparatively few hundred thousand. There was more immigration in one single year in the nineties than there was in the whole 30 years between 1790 and 1820.

Then there is involved the question of calculating the descendants of those who were included in the 1790 census. That involves care, it involves a study of the fecundity of the population at that time. That has been made with the utmost care. But, as Doctor Hill shows, if there was any error in the calculation from that 1790 stock the quota is so small in proportion to the present population that you would have to make an error of 600 persons in the population in order to get a quota difference of one person.

Mr. WALSH of Montana. Mr. President, will the Senator yield?

Mr. REED of Pennsylvania. I yield.

Mr. WALSH of Montana. I would like to inquire of the Senator whether it is a fair inference from the colloquy over this plan that the immigrants from Great Britain are rather to be desired than those from Germany, the Scandinavian countries, and the Irish Free State?

Mr. REED of Pennsylvania. I am glad the Senator asked that question, because I think the answer to it ought to lie at the bottom of all we do in the matter of immigration. The moment we come to compare nationalities we get ourselves into an abysmal conflict. No two men can agree on their preferences among nationalities as such, and everything I have ever said about immigration, and I believe everything Congress has ever done, has been on the theory that the most recently arrived Greenland Eskimo is the exact equivalent in desirability to the descendant of the first families of Virginia. We can not go on any other basis, and I would not for one moment claim that the average English immigrant is to be preferred in desirability to the immigrants from Germany or the Scandinavian countries, or from any other part of the world. I am willing to concede that every blessed one of them is the equal of my own stock, or of myself. We will get into trouble, and we will get into insoluble difficulties, if we ever go on any other basis.

Mr. HARRIS. Mr. President, I want to ask the Senator if it is not a fact that any plan except the national-origins plan discriminates against nationalities? Any other plan does that.

Mr. REED of Pennsylvania. That is true; any other plan gives some nationality more than its fair share.

Mr. HARRIS. And others less.

Mr. REED of Pennsylvania. And others less, necessarily.

Mr. HARRIS. I want to ask the Senator concerning the number of Mexicans coming into the country. Under the present law there come from Mexico half the number that come from all the other countries of the world. There are more illiterates and more illegitimates among those people than among any other people who come into this country.

Mr. REED of Pennsylvania. The Senator is exactly right.

Mr. SHIPSTEAD. I did not catch all the Senator from Georgia said.

Mr. REED of Pennsylvania. If the Senator will permit me, I will say that in substance the Senator from Georgia called attention to the very large immigration from Mexico, and to the fact that among those immigrants there was an enormous proportion of illiteracy and disease.

Mr. SHIPSTEAD. The Senator does not intend to create the impression that the immigration from Mexico has anything to do with the national origins?

Mr. REED of Pennsylvania. I was about to say, when the Senator asked me to yield, that the question of Mexican immigration is not involved in the matter of national origins at all.

Mr. BLAINE. Mr. President, will the Senator yield for a question?

Mr. REED of Pennsylvania. Yes; if the Senator will wait long enough for me to answer the Senator from Georgia first. Then I will yield.

In the matter of Mexican immigration we have a problem that is most serious. It is not involved in the question now before us at all. The great difficulty with the Mexican immigration is the difficulty of guarding the long frontier between the United States and Mexico. The Mexican frontier is a longer line than a line drawn from here to Omaha, and the number of border patrol guards is only a few hundred. With a few hundred men to guard a line from here to Omaha, we know that we could not prevent people from crossing it almost at will. If we could guard that Mexican border adequately, we would not need to change the law at all, because the present-day requirements, under the act of 1917, as to literacy and physical health, are sufficient to keep out 90 per cent of the Mexicans who are now coming in. But we will get to that question later.

Mr. COPELAND. Mr. President——

Mr. REED of Pennsylvania. I promised to yield first to the Senator from Wisconsin.

Mr. BLAINE. Mr. President, the Senator has practically answered the question I was going to ask. Why should not the national-origins principle, if it is to apply to the stock that has made this Nation, apply equally to the Western Hemisphere, Mexico, and Canada, and all others, to whom it does not apply? I ask that question for this reason, that the great influx of cheap Mexican labor to-day is having a tremendous effect upon the labor question in America, perhaps more effect than that of the immigration from any European country in any past time.

Mr. REED of Pennsylvania. I quite agree with the Senator that Mexican immigration is not needed in the United States at this time. I would like to see the flow stopped. But there is no use passing laws we can not enforce. There is no use making a face at Mexican immigration unless we can actually keep that immigration out down to the point that we set for ourselves, and until we guard the border we can not keep that immigration out.

Mr. BLAINE. Mr. President——

Mr. REED of Pennsylvania. I am trying to answer the Senator's question. I beg him to indulge me. No matter what law we pass we can not keep those Mexicans out of Texas, New Mexico, and Arizona until we guard the border. If we enforce our present law, if we are able to guard the border, we can keep them out, and we do not need to enlarge the present law to do it.

Now, one thing more. The other nations of the Western Hemisphere present no immigration problem, because we lose to them each year more people than they send to us. That is true of every nation south of Mexico clear to Tierra del Fuego. Every one of them takes more people from us than it sends us, and the number of immigrants to and fro is only a few hundred.

Canada we have always treated in such matters as the forty-ninth State. It is to everybody's interest, I think, that we continue to do so. Her population is indistinguishable from ours, anyway.

Mexico I have already mentioned. The difficulty there is in guarding the border. I think we are all agreed with the Senator from Wisconsin that for the sake of our own working people we would like to keep that Mexican immigration down to the minimum.

Mr. BLAINE. But, Mr. President, the barrier is a question of importance, as I understand.

Mr. REED of Pennsylvania. That is my understanding.

Mr. BLAINE. Why not use the Coast Guard and prohibition agents and like instrumentalities for enforcement of the immigration law? We would be as successful, would we not, in enforcing the immigration law as the Government is successful in enforcing the prohibition law?

Mr. REED of Pennsylvania. Opinions differ on that. I understand that had the national campaign gone as the Senator wished it there might have been some chance for those prohibition agents being put into the Immigration Service.

Mr. NORRIS. And we could have brought the marines back.

Mr. BLAINE. We might call on the marines to enforce this law. The question is a serious one, though, without making it applicable to the question of prohibition. Is it possible that the Government of the United States can not enforce a law, if it were a law, in relation to such an important matter, that affects the whole economic welfare of the workingmen of this country? Congress has decreed that that shall be done with reference to the personal habits of our citizens, such as involved under the prohibition law. Is there any reason why Congress should not decree that a like prohibition should be enforced against this menace that threatens the economic welfare of the American working people, men and women alike?

If we admit that the Government of the United States is impotent to enforce that sort of a law, which goes to the very foundation of the economic status of the working people of America, then certainly we are in a most ridiculous and unfortunate position when we undertake to enforce the prohibition act. I am not discussing the prohibition act, but I am merely using that as a parallel.

Mr. REED of Pennsylvania. I think great credit should go to the Department of Labor and to the Immigration Service and to the men of the border patrol for the splendid efforts they have made to enforce the law along the Mexican border. It is a superhuman task, but they have done their level best, and Congress ought to know it.

Let me make just one further statement and I shall have finished. The national origins method is criticized because of possible inaccuracies. We have it on the authority of the Census Bureau that those inaccuracies can not in any event exceed 5 per cent one way or the other, and that they probably are very much less than that. We are asked to take in place of it the 1890 basis, which we know in many respects is 50 per cent inaccurate. With all deference to the critics of the plan I have yet to understand how they can in sincerity urge us to avoid a possible inaccuracy of 5 per cent by resorting to a plan which everybody admits is 50 per cent inaccurate—and that is the proposition.

Mr. SHIPSTEAD. Mr. President——

Mr. REED of Pennsylvania. The Senator from Arkansas [Mr. ROBINSON] asked me a question, which I should like now to answer.

Mr. ROBINSON of Arkansas. I merely pointed out the fact that during the last campaign much discussion was heard from both sides as to the necessity for affording relief against the hardships imposed upon families under the administration of the present statute, and asked the Senator to state briefly how those hardships could be relieved without greatly increasing the number of immigrants.

Mr. REED of Pennsylvania. In the first place, both parties in the last campaign seemed to ignore the very good work that Congress has been doing in relieving those hardships. We went very far during the last session in apportioning the present quotas to a very large extent to the relatives of aliens now here. That was intended to relieve, and it has to a great extent relieved, the hardships caused by the separation of families. We have given the aliens living here a preference in the quota for their near relatives who are still abroad.

Mr. ROBINSON of Arkansas. Is that done by statute or by administrative authority?

Mr. REED of Pennsylvania. That is done by statute which we enacted last May.

Mr. ROBINSON of Arkansas. That was my recollection.

Mr. REED of Pennsylvania. And yet neither party seemed to remember that in the discussion of the so-called hardships. But I implore the Senate to be on its guard against these tales of hardship. Every time an immigrant comes alone to the United States, leaving his family behind him, there occurs a separation of family. He is the man that makes the separation. But let him once get his feet on American soil and he looks to Congress and says, "You are separating my family from me."

I am not going to take the time of the Senate now to read it, but I have here a quotation from one of the groups that is organized to attack, first, the national origins and then the whole immigration act which says, "We must collect enough cases of individual hardship to overwhelm Congress with them," and that is the way they manufacture these cases.

Mr. ROBINSON of Arkansas. Does the Senator feel that legislation on the subject is necessary or desirable?

Mr. REED of Pennsylvania. I think we have gone to the limit. I think Congress has been as generous as any reasonable person can ask. We have changed the law in other respects as well. We have allowed an American citizen just recently naturalized to bring his wife and his children. We have given them a preference for their fathers and their mothers. We allow them, before they are naturalized, to get their wives and children in under the quota, but an American citizen after naturalization can bring them in regardless of the quota. We have gone just as far as it is possible to go in an effort to be humane and still stick to this policy, which, to my mind and to the minds of many Senators, is as important to the United States as any other policy that we follow.

Mr. SHIPSTEAD. Mr. President, will the Senator yield to me now?

Mr. REED of Pennsylvania. I am glad to yield.

Mr. SHIPSTEAD. Will the Senator explain, for the information of the Senate, the method used by the Census Bureau and how they arrive at a determination of the national origins of the people of the United States in such a way that they can base immigration quotas upon their finding?

Mr. REED of Pennsylvania. That has already been put into a Senate document. I tried to explain it briefly, but I think the Senator's attention must have been distracted. I would rather not repeat it this morning. It is based on taking the 1890 census and the immigration since that time, a study of the foreign born shown by the last census, and a study of the children of foreign born shown in the last census. The result in the last analysis compares very favorably with the claims that those people themselves made before there was any immigration law. Doctor Faust, who has written on the German element in the United States, claims for that element a proportion almost exactly the same as is conceded to it by the Census Bureau in this calculation. If we test them by their own claims, the same is true of the Irish. Test them by their own claims before we had any immigration law and it will be found that we have given them everything they then claimed.

I send to the desk and ask to have printed in the RECORD at the close of my remarks tables giving the quotas based, respectively, on the 1890 census and on national origins.

The PRESIDING OFFICER (Mr. VANDENBERG in the chair). Without objection, it is so ordered.

The tables are as follows:

National origins and American immigration

	1890, foreign born basis [1]		National origins basis [2]	
Northwest Europe:		*Per cent*		*Per cent*
Belgium	512	0.31	1,328	0.86
Denmark	2,789	1.69	1,234	.80
France	3,954	2.40	3,308	2.15
Germany	51,227	31.12	24,908	16.21
England, Scotland, Wales, and North Ireland	34,007	20.65	65,894	42.89
Irish Free State	28,567	17.37	17,427	11.34
Netherlands	1,648	1.00	3,083	2.00
Norway	6,453	3.92	2,403	1.56
Sweden	9,561	5.80	3,399	2.21
Switzerland	2,081	1.26	1,614	1.05
Other northwest Europe	200	.12	200	.13
Total	140,999	85.6	124,798	81.20
Southeast Europe:				
Austria	785	.47	1,639	1.06
Czechoslovakia	3,073	1.86	2,726	1.77
Finland	471	.28	568	.36
Greece	100	.06	312	.20
Hungary	473	.28	1,181	.76
Italy	3,845	2.33	5,989	3.89
Lithuania	344	.20	492	.32
Poland	5,982	3.63	6,090	3.96
Portugal	503	.30	457	.29
Rumania	603	.36	311	.20
Russia	2,248	1.36	3,540	2.30
Yugoslavia	671	.40	739	.48
Other southeast Europe	1,225	.74	1,385	.90
Total	20,323	12.30	25,429	16.50
Asia	1,624	.99	1,758	1.14
Africa	1,200	.72	1,200	.78
Australasia	521	.31	500	.32
Grand total	164,667	.....	153,685	.....

[1] Each country gets 2 per cent of those born in that country counted in the 1890 census. These quotas, therefore, are based on 8,000,000 people in 1890.

[2] Based on the entire white population in 1920, native and foreign born alike, derived from the quota countries, 89,332,158 in all. Each country gets such proportion of 150,000 immigrants as it contributed to the total white population from quota countries, 89,332,158.

Mr. HARRISON obtained the floor.

Mr. SHIPSTEAD. Mr. President, will the Senator from Mississippi yield to me?

The PRESIDING OFFICER. Does the Senator from Mississippi yield to the Senator from Minnesota?

Mr. HARRISON. Yes; I yield to the Senator.

Mr. SHIPSTEAD. If the Senator will yield to me, I desire to read a paragraph from a report of the House Committee on Immigration in connection with this subject.

Mr. HARRISON. I yield to the Senator from Minnesota for that purpose.

Mr. SHIPSTEAD. This is from House Report No. 2029 of the Committee on Immigration of the Sixty-ninth Congress:

The committee having considered the text of Senate Joint Resolution 152, to postpone for one year the going into effect of the national origins provision of the immigration act of 1924, is of the opinion that at the end of one year from July 1, 1927, the same uncertainty as to the results of regulating immigration by means of the "national origins" plan will continue to exist.

That the Secretaries of State, Commerce, and of Labor will have little, if any more, positive evidence on which to base quota findings than at present.

That it seems far better to have immigration quotas for the purposes of restriction fixed in such a manner as to be easily explained and easily understood by all.

* * * * * * *

That the committee is of the opinion that the United States, having started on a policy of numerical restriction, the principle of which is well understood, that little will be gained by changing the method.

Mr. HARRISON. Mr. President, the immigration question in this country is not the great issue that it was once, although sometimes, in order to play upon the fancy and arouse the prejudice of some people some would-be orators try to make it a major issue. I was delighted that in the recent campaign both political parties in their platforms stood for the most restricted immigration and that the presidential candidates of both political parties differed as to details only, both expressly stating that they were against increasing immigration to this country. So any expression made by anyone touching the position of candidates on the Republican or the Democratic tickets in the recent campaign, that they favored an increase in immigration, is erroneous and unjustified by the facts.

People have always differed on the immigration question; it has never been a partisan question. In my more than 18 years' experience in Congress I have never seen politics enter into the subject of immigration. I remember when I was a Member of the other House the distinguished Augustus P. Gardner, a Republican from Massachusetts, sitting by the side of the little giant from Alabama, John L. Burnett, and fighting for the enactment of the literacy test. I saw that law passed through both Houses of Congress and go to a Republican President, and I saw him veto it.

Then two years later I saw the same gentlemen fighting with those who had assisted them in the previous Congress, adopt a literacy test and pass a bill restricting immigration into this country, to a very large extent, though, of course, not so much as under the present law. I saw that bill go to a Democratic President; he took a different view from the Congress, and vetoed the bill; but Representatives and Senators laid aside their partisanship and voted to override the President's veto, and the bill became the law of the land, and from that time on we have had restricted immigration. It was my pleasure in both instances to vote to override the presidential vetoes.

The enactment of the literacy test was a most restrictive measure and a great forward step. When, however, a few years later immigrants were getting ready to come here by the millions and the question came up as to the best way of giving to the American people a good immigration law and preventing the most undesirable groups of immigrants from coming here, we adopted the quota system based on the 1890 census, first, I believe, with a restriction of 3 per cent and afterwards of 2 per cent.

The difference between the national origins test and that of the quota method based upon the census of 1890 is, of course, apparent, but apparent only in a minor degree. The gentlemen in the House and in the Senate who fought for restricted immigration legislation were not so much interested as to the difference between the national origins plan and the quota system based on the census of 1890. As a member of the Immigration Committee, I accepted the national origins test, although, from the information that came to us we appreciated the difficulty of putting it into effect. It has been difficult. Three Cabinet members of the present administration have been unable to agree concerning it. Of course, it is not the first time in their public experience that they have been unable to agree, but in this instance the disagreement was open and expressive. The distinguished Senator from Pennsylvania [Mr. REED], who championed the national origins provision, cited three communications from the next President of the United States, together with two of his colleagues in the Cabinet, giving different versions and conclusions, but all stating that it seemed to be almost impossible to compile the figures so that the national-origins plan could be put into immediate effect.

Mr. REED of Pennsylvania. Oh, no, Mr. President; it was only in the third communication that they reached that conclusion.

Mr. HARRISON. Well, the third communication. Now, I am going to read to the Senator from Pennsylvania a fourth communication about which he did not tell the Senate. This was the communication of the Senator's candidate for President in his acceptance speech. I know how strongly the Senator feels about the national origins provision and I know that he has pledged again to-day to dedicate himself to the service of the national origins test and to fight all who may attempt to repeal it or to ask for a postponement of it. I say to the Senator—and the chairman of the Immigration Committee, who is on the floor here, I think will agree with me; if he does not, I want him to say so—that there will be a proposal from the admininstration before the 1st of July next, when the national origins test is to go into effect, either asking for a further postponement in order to settle the question or asking for a repeal of the national origins test. There will have to be one or the other. Does the Senator from Pennsylvania think that the next President is going to change front this quickly?

Mr. REED of Pennsylvania. Does the Senator have better information than the others of us about their intention?

Mr. HARRISON. I know more about the President elect, I think, than the Senator from Pennsylvania does. That is one among many other reasons why I did not vote for him for President. I have here what Mr. Hoover in his acceptance speech said. I do not understand how the Senator overlooked it when he was taking us into his confidence and giving us his various communications touching the national origins provision. This is the last utterance that touched this important question. The Senator I think at the time was in Europe and perhaps did not read Mr. Hoover's acceptance speech; and I do not blame him for that. [Laughter.]

We shall amend the immigration laws to relieve unnecessary hardships upon families.

The Democratic candidate for President stated the same thing. There was no difference upon that question.

As a member of the commission whose duty it is to determine the quota basis under the national origins law, I have found it is impossible to do so accurately and without hardship. The basis now in effect carries out the essential principle of the law, and I favor repeal of that part of the act calling for a new basis of quotas.

The Secretary of Commerce in all of his communications has practically stated that he is opposed to the national origins test, not because it might permit fewer to come than under the 2 per cent provision based on the census of 1890, although that would permit the coming in, as the Senator has said, of some 11,000 more immigrants, but is because he doubts, from information coming to him, that they can arrive at a proper conclusion upon which to base the quotas.

So I submit that there is no great difference in the American Congress now on the immigration question. There is not the slightest chance of lowering the bars that restrict immigration into this country. Neither of the political parties in the recent campaign stood for any increase, and I heard of no candidate for any position standing for any increase in immigration. The difference was as to details, and the question as to which country should get a larger or smaller quota. The Democratic presidential candidate in his Nashville speech, as well as on other occasions, expressly stated, "I do not favor any increase in our immigration."

Personally, if this question can be worked out on the basis of the national origins provision, I should like to see that provision put into effect; I think theoretically it is sound; but I believe, in view of the communications coming to us from the Cabinet officers to whom we entrusted this matter, we are going to be forced before July 1 either to repeal the provision adopting the national origins test or we have got to postpone it and give a longer time before it shall go into operation.

Mr. SHIPSTEAD. Mr. President, Doctor Hill made a statement before the Immigration Committee of the Senate upon which, I believe, the entire argument in favor of the national origins law is based. I ask unanimous consent that Doctor Hill's statement may be printed in the RECORD, from page 8 to page 21 of the Senate hearings—the entire statement of Doctor Hill—for the information of the Senate.

The PRESIDING OFFICER. Is there objection?

Mr. REED of Pennsylvania. Reserving the right to object, it seems to me if we are going to print any of it in the RECORD, it all ought to be printed.

Mr. SHIPSTEAD. My request covers all of Doctor Hill's statement. I merely named the pages so that it should not be confused with other matter in the hearings.

Mr. REED of Pennsylvania. Some one else also testified.

Mr. SHIPSTEAD. There were some other things stated in the hearings, but I have asked that Doctor Hill's statement be printed complete.

The PRESIDING OFFICER. Is there objection to the request?

There being no objection, the matter was ordered to be printed in the RECORD, as follows:

STATEMENT OF DR. JOSEPH A. HILL, ASSISTANT TO THE DIRECTOR OF THE CENSUS

Doctor HILL. Gentlemen of the Senate committee, this report we have submitted to the three secretaries——

Senator KEYES. You have made a report which is embodied in Document No. 65, I believe?

Doctor HILL. Yes, sir.

Senator KEYES. Will you go over that briefly?

Doctor HILL. We had to consider the problem, of course, in relation to the available data that were in existence and could be utilized in arriving at a determination of the national origins, or the proportion of the total population which is derived from each country which is concerned.

Now, we had the following classes of data: We had the century of population growth, in which is a classification of the population in 1790 on the basis of the names of heads of families. That classification was prepared some years ago before there was any thought of its being utilized in connection with this matter of regulating immigration on the national-origins basis. That was one class of data.

Another set of data consisted of the census statistics classifying the foreign born by country of birth. That classification was first applied in 1850 and has been continued in each census down to the present time.

Then there is the census classification of children of the foreign born with reference to birthplace of their parents. There was a partial classification of this kind in 1880, but the first complete classification on that basis was made in 1890 and has been repeated in each subsequent census.

Then we have the statistics of immigration to this country, which record begins with 1820 and comes down to the present time.

These were the main classes of data that we had on which to base this determination of national origin.

Well, having in mind the data, it was obvious that as a first step it was necessary to distinguish that portion of the total population of the United States which was derived from the population enumerated in 1790, because one set of data related entirely to that portion of population, while the other set of data related entirely to the other portion of population. So we made that fundamental distinction, by a process which I could not describe in detail for the lack of time and because it is very statistical. We made that distinction. We distinguished that proportion of the population of 1920 which is derived from the population in 1790. We called that the original native stock. It was necessary to designate these two divisions in some convenient way, and we called that portion of the population derived from the original population of 1790 the original native stock, and we called the remainder of it, which is derived from people who have come to this country since 1790, the immigrant stock. Of course, we realized that in the last analysis we are all descendents of immigrants, but we used that term to distinguish that portion of the population descended from immigrants who came to this country after 1790.

Then we distributed the original native stock on the basis of the 1790 classification on the assumption that if the English, for instance, constituted a certain percentage in the 1790 population they constituted the same percentage of that portion of the 1920 population which is derived from the 1790 population. We used for that purpose the classification in the Century of Population Growth.

We didn't feel satisfied, however, that that classification was entirely reliable. We recognized the fact that it was not so in the first report, which we submitted in December, 1926. We pointed out in the report that there probably was a considerable element of uncertainty in that 1790 classification, which was based on names, for reasons which we gave there; but as that was the only complete classification available, we were accepting it provisionally. We tried to make that clear—that this first analysis which we made was a provisional analysis. It was not submitted as being final, and we pointed out at the time that it was subject to revision, and that we intended to go ahead and revise it.

I placed some little emphasis on that fact, because I find that an argument has been based on the fact that our final determination differed so much from the first report. The argument is that "Here this committee made a classification of the national origin in 1926, and they have made another in 1927, and they differ quite materially, which indicates that there must be considerable uncertainty about the matter." Now, the fact is that the revised classification did not differ from the original classification any more than we anticipated that it would at the time that we submitted the original classification. We expected it would differ; we expected that the estimate of the English element would be reduced. But we had reached no conclusion at that time as to how much it should be reduced, and therefore it seemed to us better for the purposes of the provisional estimate to accept the figure as it stood in the Century of Population Growth and wait until we had made a further study of the sources before we determined on the reduction.

As indicating that that final classification did not differ much more than we anticipated, I might say that one of my colleagues at the time that we submitted the provisional classification, being interested in the matter, tried to forecast how much it would differ from the final classification, and he estimated that in the quota of Great Britain and Northern Ireland the maximum reduction might be as much as 10,000. But the reduction we finally made was only 7,000. He likewise estimated that in the case of the Germans and the Irish, there might be—well, in the case of the Germans he estimated that there might be an increase of as much as 3,500, while there was in fact an increase of only 1,480. In the case of the Irish he estimated there might be an increase of as much as 6,000, and the actual increase proved to be only 3,500. So, as far as the difference between those two estimates is concerned, it was nothing more than we anticipated and expected, because the first estimate was a provisional estimate.

Senator REED. Doctor Hill, what caused the decrease in the English and Scotch and Welsh?

Doctor HILL. Well, we realized that in all probability a great many names had been classified as English which were not of English origin, partly because of the probability that a good many names that were not of English origin became anglicized, after their possessors came to this country; and partly because where the classifiers were in doubt about a name the natural tendency would be to assign it to the majority class, or the class that was dominant in that community on the principle that it was more likely to belong to the majority class than to the minority.

In the matter of the correcting of the Century of Population Growth estimates, we had the assistance, I might say here, of two well-qualified experts, employed by the American Council of Learned Societies. The American Council of Learned Societies felt that as a contribution to history and quite apart from its relation to immigration restriction, it was of great interest to determine the origin and racial composition of the population of the United States. They had had that question under consideration for some time. Two research experts were engaged to study that question. They had no official connection with our committee, of course. But they worked here in Washington in the Library and were situated so we could avail ourselves of the data and results which they got. One of these was a man who had taken a doctor's degree in history and had been working several years on a report on immigration from Europe to the United States. The other is a man who had made a study of the origin and occurrence of family names. He got interested in that subject for some reason, has devoted a great deal of attention to it, and has come to be an authority on that subject. We utilized his assistance in arriving at this corrected figure. With his knowledge of the facts, he could tell with confidence whether a name was distinctively English or whether it was not distinctively English. He made a count of distinctively English names, and then he increased that number in about the same proportion as it bore to the names of less common occurrence in England. He had some of the records on that subject—data compiled in England to show how many people in the population of England were represented by certain family names of common occurrence.

His computation was confirmed in two ways: In the first place, it was in substantial agreement with the conclusions that had been reached independently by a historian of eminence. I do not know that I ought to give his name, because he has not published the results of his inquiry, but he made this inquiry before there was any question about national origin in relation to immigration. He reached the conclusion that the English element in the United States in the Century of Population on Growth was too large by a certain percentage, and his result harmonized with the result which we got.

Then the expert on immigration took up the study from the other approach; that is, he was not trying to determine the size of the English element; he was trying to determine the size of the non-English elements, and the question was whether the result which he arrived at as to the size of the non-English element would fit in with the results of the computations as to the size of the English element, so that the two together would account for the total population. His results did fit, very closely. His plan of procedure was this: To take one nationality at a time—the Dutch, for instance—and make use of county histories and local records. He took it up county by county.

Senator WILLIS. In what States?

Doctor HILL. In the States where the nationality was chiefly represented.

Senator WILLIS. Did he take it the country over then?

Doctor HILL. Suppose he starts with the Dutch nationality, for instance. There are numerous States in which there were no Dutch, and it would be no use bothering with those States. But New York he would work through very carefully, and I presume New Jersey and Massachusetts; I do not know. From those local records he was enabled to determine what names really were Dutch. Of course, he found a good many instances of a name that seemed like English, when

the record showed it belonged to a family originally coming from Holland, but that there had been a change of names; take, for illustration, the name of Cole. Almost everybody would say that that is an English name, but, as a matter of fact, he found that in some of these counties the name was originally Kool and was of Dutch origin. Consequently, he would classify the Coles in that county as Dutch instead of English, though anybody not familiar with the historical background would doubtless have classified them as English.

As I say, his results fitted in with the results of the other line of inquiry. So we felt we were justified in making that reduction in the British quota. It was a reduction of 10.4 per cent.

Senator REED. Has any inquiry been made since the preliminary report in foreign countries to determine their statistics of emigration?

Doctor HILL. Yes; that concerns the other half of the population, what we call the "immigrant stock." There we used census data from 1890 down, and that settled the classification of the foreign born themselves, and of the children of foreign born. These two elements of the immigrant stock are based directly on census figures. There was not any element of estimate there except such as was necessary on account of the changes in political geography—a factor which enters into the determination of the present immigration quotas for that matter.

Senator REED. If the question be raised of the element of uncertainty due to changes in political boundaries in Europe, it is true, is it not, that that element of uncertainty pertains as much to 1890 basis as to the national origin?

Doctor HILL. Quite true.

Senator REED. There is a necessary factor of guesswork there?

Doctor HILL. Or of estimate; yes.

Senator REED. In the effort to determine what portion of German immigration, let us say, came from German Poland?

Doctor HILL. Yes. I think there is perhaps a somewhat erroneous impression about that. Most people, I believe, have the idea that the 1890 basis rests upon exact figures, but that is rather far from being the case, because the 1890 census does not show how many people there were in the United States in 1890 who were born in that portion of Europe which is now Czechoslovakia. That had to be estimated. It does not show how many people there were in the United States in 1890 who were born in that portion of Europe which is now Yugoslavia; that had to be estimated. It does not show how many people there were from that portion of Europe which constitutes the present Germany or the present France, or the present Irish Free State; all through that had to be estimated. The law contemplates that. It provides that where there have been transfers of territory, the number of people born in the transferred territory shall be estimated. So there is a pretty large element of estimate in the 1890 basis.

Senator REED. Of course, that is true of all the new countries created by the war, for example, Poland, Lithuania, Latvia, Estonia, Finland.

Senator WILLIS. That is practically a matter of guesswork.

Doctor HILL. We worked it out as carefully as we could.

In making the 1890 allocation, as there was not very much time for careful study, the committee adopted rather arbitrarily the assumption that the immigration from the original country had been spread evenly through the parent country—say that 10 per cent of the population had been transferred from one country to another, it was assumed that the transfer took with it 10 per cent of the immigration. That was the assumption we made in arriving at the quotas on the 1890 basis.

This time we have made use of that assumption only as a last resort. If we could get better data, and we usually did, we make use of that better data.

Senator WILLIS. Perhaps this question would come better later. I have been wondering about this feature. I realize it is exceedingly technical, exceedingly difficult, and exceedingly complicated and requires the most careful investigation by experts. Would there be any advantage if this portion of the act were delayed in its operation; would it give you opportunity for more accurate conclusions?

Doctor HILL. I think it desirable, whether the act is to be enforced at once or whether it is to be postponed—it is an idea of my own—that there should be organized some kind of a permanent board of review or of revision. And it should not be this committee which made the original estimate, but a distinct body, which I should think had better not consist of officials of the Government or employees of the Government exclusively, but should be an outside body of men—men whose names would carry confidence—and that that organization should have the authority to review and revise from time to time any of these quotas, or all of them, on the basis of further study and further research into the sources.

I really do not anticipate that the resulting changes would be very radical in any case. But, after all, this is a matter of such importance that I believe we ought not to rest satisfied with anything short of the closest approach to accuracy that we can make.

Senator WILLIS. The information and the conclusions that you now have you feel to be more accurate than the ones that could have been given a year ago?

Doctor HILL. Oh, yes.

Senator WILLIS. And presumptively if you had more time, not indefinite, but we will say another year, you would reach more accurate and more scientific conclusions?

Doctor HILL. It could be improved. One source of confidence, with me, at least, is the fact that in building up from several distinct elements we do not apply one computation to the whole population, but we get at one element of population and then another element of population separately, the result being that there might be quite a percentage of error in one of those elements which, when it came to be swallowed up in the total would not produce any material difference.

Bearing on that point I made a computation the other day; I asked myself this question: "Here we have estimated that 41,000,000 in round numbers of the population at the present time is original native stock and 53,000,000 is immigrant stock, as we define it." I said, "Suppose we had made an error of a million; suppose one stock ought to be a million greater and the other a million smaller, how much effect would it have?"

As I remember, it made a difference of about a thousand in the English quota and about 300 to 400 in the German and Irish quotas, and of less than 50 in any other quota. So it did not seem so very vital.

Senator COPELAND. Would there occur a criticism like this: You know the Irish have contended there were a great many more Irishmen in the United States than the census of 1790 showed.

Doctor HILL. We concede that.

Senator COPELAND. That the Continental Army had hundreds of Irishmen, who must have evaporated between the time of dismissal from the Army and the census. Now, if they had all been counted it would not have made very much difference in the long run?

Doctor HILL. All been counted?

Senator COPELAND. At least they all had been counted in the census?

Doctor HILL. I fancy if all had been counted that these Irish patriotic societies claim in the United States it would make some difference.

Senator COPELAND. Considerable difference?

Doctor HILL. Considerable difference. They have pretty high estimates of the number of Irishmen.

Senator COPELAND. Would it make a difference of several thousands?

Doctor HILL. No.

Senator COPELAND. Not that much?

Doctor HILL. No.

Senator REED. What did you do to check the accuracy of this claim, Doctor, if anything?

Doctor HILL. We did not do anything, strictly speaking. We went at it in an independent way and reached our own figures. We did not review the evidence they submitted.

Senator REED. You studied the Irish element in the same way you have the other elements?

Doctor HILL. Yes.

Senator REED. The way you described before, by checking back against the Irish immigration and that sort of thing?

Doctor HILL. Yes.

Senator COPELAND. Doctor, did you not consider that the evidence each presented had a value which entitled it to consideration?

Doctor HILL. I think it had value to this extent, that we would agree that there were more people of Irish origin in this country than the Century of Population Growth credited them with. I have no doubt we agree with them, as our result shows. We have increased the Irish quota on that basis partly, and I think there is an under classification of Irish in that volume of the census; I think they were perfectly justified in making that claim. But I think they exaggerated the extent of the underclassification.

Senator REED. Do your present figures involve an allowance of an increased number of Irish in 1790 over that which was shown?

Doctor HILL. Yes; that is perfectly right.

Senator COPELAND. But your present allowance is not as great as it would be if you had accepted their figures, I take it?

Doctor HILL. I imagine not. I never tested what their figures would give.

Senator COPELAND. Is it true of other races? Were there the same percentage of the overlooking of other nationalities as well as Irish in the census?

Doctor HILL. I do not know that other races made so definite claims. I think our German figure comes pretty close to the German figure Doctor Faust arrived at in his book on The German Element in America. I have not looked that up, but I have that impression.

Senator COPELAND. Did you increase the number of Germans quite materially in this most recent estimate?

Doctor HILL. Over what we have now in 1890?

Senator COPELAND. No; over the first.

Doctor HILL. Well, we increased them 1,480.

Senator COPELAND. What happened to the English?

Doctor HILL. The English were reduced.

Senator COPELAND. How much?

Doctor HILL. Seven thousand one hundred and forty-five.

Senator COPELAND. And how much were the Irish increased?

Doctor HILL. The Irish were increased by 3,565.

Senator COPELAND. What about the Scandinavians?

Doctor HILL. The Scandinavians did not get very much increase. Norway got only 136; Sweden only 140.

Senator SHIPSTEAD. Doctor, upon reading the report I got the idea that the census of 1790 plays a very important part in your report.

Doctor HILL. Yes; that is true.

Senator SHIPSTEAD. It is almost a foundation for the entire report, as I read it.

Doctor HILL. Well, you are talking now about the census records, not about the Century of Population Growth?

Senator SHIPSTEAD. I am talking about the census record, and the Century of Population Growth is based, as I understand it, upon the census of 1790?

Doctor HILL. Yes.

Senator SHIPSTEAD. So the census of 1790 becomes the key to the arch of the whole basis of calculation, as I understand the report. I wanted to know if that is your idea.

Doctor HILL. Yes. For that part of the population which we call the original native stock, representing about 45 per cent of the total.

Senator SHIPSTEAD. Can you tell us how many or what percentage of the statistics gathered in that report were destroyed when the British burned the Capitol here?

Doctor HILL. Well, the records for New Jersey, Delaware, Georgia, Kentucky, and Tennessee. These records have been lost, but it is not altogether certain that they were destroyed when the British burned the Capitol, although that is the tradition.

Senator SHIPSTEAD. It was given at one time as something like six or seven States of which the statistics were burned at that time—so given by one of the Commissioners of Immigration.

Senator COPELAND. Does the Senator mean that the records relating to those States were burned?

Senator SHIPSTEAD. Yes. Doctor, I believe the census of 1790 showed, roughly, 3.4 population; was that right?

Doctor HILL. Three and four-tenths what?

Senator SHIPSTEAD. What did the records show for the number of people in 1790?

Doctor HILL. The whole population?

Senator SHIPSTEAD. Yes.

Doctor HILL. That was approximately 3,000,000; approximately that.

Senator SHIPSTEAD. Three million four hundred and some odd thousand?

Doctor HILL. I think so; yes. (It was 3,172,006.)

Senator SHIPSTEAD. In 1890, according to your report, there were 30,400,000. That would indicate that the people who lived here in 1790 multiplied in a hundred years ten times?

Doctor HILL. Yes.

Senator SHIPSTEAD. That would indicate that every female born in the United States during that period, including those who died in infancy, including those not married, and including those who did not have children—but every female so born would have to have had an average of 4¼ children?

Doctor HILL. I am not sure.

Senator SHIPSTEAD. Assuming that one-seventh of the total of the females born in that period of time had no children at all, the other six-sevenths then would have had to have seven children?

Senator REED. Is that so, Doctor?

Senator COPELAND. Not quite that, would it? It would be seven-sixths of 4¼?

Senator REED. Seven-sixths of 4¼.

Senator COPELAND. It would be 4.95, would it not?

Doctor HILL. What were your basic figures?

Senator COPELAND. Seven-sixths of 4¼. I think it would be about five children.

Senator SHIPSTEAD. An increase of ten times in a hundred years.

Senator COPELAND. In these modern days it would not.

Senator SHIPSTEAD. In these modern days we have eliminated really all diseases of children in infancy?

Senator COPELAND. Yes.

Senator SHIPSTEAD. Everyone having the average length of life and the average number of people who grow to adults, including children.

Senator COPELAND. Only 30 years ago one-fourth of the babies died in the first year of life.

Senator SHIPSTEAD. Are you sure that is correct?

Senator COPELAND. The figures I am giving you?

Senator SHIPSTEAD. Yes.

Senator COPELAND. Yes.

Senator WILLIS. What conclusion are you getting at, then, Senator SHIPSTEAD? You are challenging the extent of the figure attributed to the original native population?

Senator SHIPSTEAD. In 1890. Of course, the law says nothing about giving anyone authority to distinguish between the people who lived here before 1790 and those who came since. There is nothing in the law that requires a distinction shall be made between what the commission has designated as native stock and those who have come since. There is nothing in the law that provides for any such division of the population of the United States. It may be desirable to some people to have it so divided, but the law does not provide it shall be done.

The law also says that the ancestry of individuals shall not be traced. Well, if you go back to the names of the census of 1790, that is just what you are doing, because the census of 1790 did not say where the various people came from in Europe; it only took the age and the name.

Senator WILLIS. I want to get your conclusion. Then, in your judgment, are those the figures we have as to the portion of all present population that descended from the original native stock not correct? They are too large; is that it?

Senator SHIPSTEAD. I am not making that charge. It seems to me that it is absolutely unreasonable.

Senator WILLIS. That is what I want to get. That is your idea?

Senator SHIPSTEAD. I can not arrive at any other conclusion.

Senator REED. Did you allow the same ratio of growth for the immigrant stock coming since 1790 you did of the native American stock?

Doctor HILL. In the process by which we arrived at our result that question did not arise. In using the age figures, and the carrying the computation back this matter took care of itself.

Senator REED. The custom was to allow them the same percentage of fecundity that was allowed to the native stock?

Doctor HILL. No; that is not true. We made no assumption about it and the computation involved no assumption. It is based on the census, which showed what percentage of each age group were the children of native parents. So we did not have to raise that question. I do not believe that that increase is in any degree improbable. The growth of population was marvelous in this earlier period. It went on increasing about 35 per cent each decade for several decades, until along about the time of the Civil War. Then it was checked. I do not believe that any statistician would claim that that was an impossible increase.

Senator COPELAND. How do you account for that very rapid increase in the earlier years?

Doctor HILL. The people were prolific; they all had big families in those early days. The death rate was high, but, nevertheless, they had such big families that they could lose two or three children and still show a great increase.

Senator REED. I would like to ask Doctor Hill, who is a census expert, what, in his opinion, is the fairest way to all of the nationalities involved of calculating the distribution of the aggregate quota of immigration that Congress sees fit to admit.

Doctor HILL. I am not sure that my qualifications as a census expert or a statistician make my judgment on that question of more value than other peoples. I will say, however, that no proposition has been brought to my attention that seems to me fairer than this one of national origin. There seems, indeed, to me to be a rather marked absence of alternative proposals, except the 1890 basis; that is about the only alternative I have had brought to my attention as against the national origin plan.

Senator REED. Does the distribution of quotas based on the 1890 census reflect with any accuracy the proportion of nationalities that now exists in the United States?

Doctor HILL. No, indeed; it does not.

Senator REED. It gives the German quota, for example, 51,000 out of a total of 164,000.

Doctor HILL. Yes.

Senator REED. Is the German element in the American population 51 to 164?

Doctor HILL. No, sir; it is not. I do not see how anyone could be surprised at the fact that the German element forms a smaller portion of our total population in 1920 than it did of the foreign-born population in 1890; and in the same way with some of those other nationalities. Everyone must know, I suppose, that the English formed a larger proportion of the original stock in 1790 than any other nationality, and that they must form a larger proportion of the present population than they did in the foreign born in 1890. That seems to me is almost self-evident without regard to whether our figures are accurate or not. That is a general fact that must result from the shifting from the 1890 to the national origin basis.

Senator REED. Doctor Hill, if Congress should see fit to adopt the resolution introduced by Senator JOHNSON yesterday and postpone the going into effect of the national origins scheme for another year, could your committee during that year revise and add a greater precision to the figures which you have recently reported?

Doctor HILL. Yes; I think we could, somewhat.

Senator REED. It would enable you to check up, would it, the results given there?

Doctor HILL. I could wish they might delegate that task to some other body.

Senator KEYES. Could not both be done? It would be an extremely important matter, and I should think if you could revise your figures it would be desirable.

Senator BLEASE. Doctor, could you tell from your statistics what the American population was in, say, 1900?

Doctor HILL. I do not recall exactly. It was about 76,000,000.

Senator BLEASE. I am just asking, could it be found?

Doctor HILL. Oh, of course.

Senator BLEASE. And what is it now?

Doctor HILL. In 1900 and now?

Senator BLEASE. Yes.

Doctor HILL. Oh, yes.

Senator BLEASE. And could you tell what percentage of those people had become American citizens and what percentage are in this country remaining not naturalized?

Doctor HILL. You mean what proportion of the foreign-born population has been naturalized?

Senator BLEASE. Yes.

Doctor HILL. Yes; that is in the census.

Senator BLEASE. What I want to find out is, how rapidly the foreign element are becoming voters and how long it will take them to outvote the American people at the present rate they are coming in.

Senator REED. Senator Blease, in 1924, when the immigration act was in committee, statistics were presented that showed the proportion of the foreign born of the different nationalities who had become naturalized. The lowest, as I recall, was that of the Greeks, where 24 per cent of those of Greek birth in this country were naturalized. That ran up until some other nationality showed nearly 80 per cent naturalized.

Senator WILLIS. But that would not show anything about voting. You are showing citizenship and not voting. You are asking about voting, are you not, Senator?

Senator BLEASE. Yes; I am asking about voting.

Senator WILLIS. There is nothing in the census about voting.

Senator REED. No.

Senator BLEASE. What I want to find out is at what rate they are coming in and how long it will take them at that rate to outvote American citizens, or until they are more numerous than are original American citizens.

Doctor HILL. You could not tell that from the census figures.

Senator COPELAND. I suppose we are all in a sense naturalized if we go back far enough.

Senator BLEASE. I was not naturalized; I was born over here.

Senator COPELAND. Was the census of 1800 a more accurate census than 1790?

Doctor HILL. I do not know of any reason why it should have been. I never had occasion to consider that question, but I do not see why they should not have been equally accurate. They were both taken under the same organization and under conditions not very different, I should say.

Senator COPELAND. Do you consider that the census taken at that early period was anything nearly as accurate as it is to-day?

Doctor HILL. I think so, because they had a very simple census to begin with. They did not have this vast mass of detail that we have to carry now and, in the second place, because they had not the confused conditions we have to contend with in the big cities, or the floating population that we have now. The population was much more permanent then, and I imagine that the enumerators in most cases were fairly well familiar with the population which they enumerated. If there was any difference, I should think it would be in favor of the 1790 census as against a later census.

Senator COPELAND. In your opinion the national origins law founded on the census of 1800 would bring practically the same percentages as 1790?

Doctor HILL. Yes.

Senator COPELAND. Would that be true as to 1810 and 1820?

Doctor HILL. I do not think there was enough immigration had come in at that time——

Senator COPELAND. We had immigration in the forties.

Doctor HILL. About that time.

Senator SHIPSTEAD. Doctor, have we got the returns for 1800?

Doctor HILL. Have we got them?

Senator SHIPSTEAD. Yes.

Doctor HILL. There are some States missing still. The States for which the 1800 census records are missing include: Georgia, Kentucky, Mississippi, New Jersey, Tennessee, and Virginia, and certain limited areas in some other States; also Indiana Territory and Northwest Territory.

Senator SHIPSTEAD. There were six or seven missing out of 1790.

Senator WILLIS. I was wondering whether or not that might not be a check worth while. Our committees made these computations on the basis of the census of 1790. Suppose they should start an entirely independent inquiry, taking the census of 1800 and 1810 and see where they come out. It would be a pretty useful check, would it?

Senator COPELAND. Up as far as 1830 it would be.

Doctor HILL. That would be a very large undertaking, a very large task, especially as we would have to work with manuscript records. We haven't printed these schedules as we have those of 1790.

Senator WILLIS. You say you have not any printed record for the census for the earlier periods?

Doctor HILL. I mean by that, the original records. Of course, we have census reports giving statistics.

Senator WILLIS. 1790 was printed; 1800 was not, or 1810?

Doctor HILL. No; nor has any later census been printed.

Senator SHIPSTEAD. Can you tell me the first census we took in which we undertook to find out what country these people came from?

Doctor HILL. 1850.

Senator SHIPSTEAD. There was nothing done up until that time by our census enumerators to determine where these people came from in Europe?

Doctor HILL. That is true.

Senator COPELAND. In 1850 did they go back further than the immediate parents?

Doctor HILL. It did not go back as far as that; simply their own birthplace; whether foreign born, and in what countries.

Senator COPELAND. When did they begin to ask anything about the parents?

Doctor HILL. They made a beginning in 1880, but, as I stated a while ago, that was not a complete classification. The first complete classification made of parents was in 1890.

Senator SHIPSTEAD. Then, until 1850 there was nothing to show, except by assuming from the names?

Doctor HILL. Well, we have the immigration figures, you know.

Senator SHIPSTEAD. Were there any other immigration figures other than those required by the Government to be filed by the officers of incoming ships with the immigration officers, the number of passengers, and that the passengers landed were accredited to the flag carried by the ship?

Doctor HILL. I think you are right about that. I am not familiar with the immigration regulations of those days.

Senator SHIPSTEAD. So if the ship came in carrying passengers from all over Europe, assume she had a thousand passengers, the officer would file with the immigration department a manifest showing that a thousand come here, and that German ship and immigration officials would accredit those immigrants to Germany; is that right?

Senator REED. I doubt whether there was any ship of that capacity at that time.

Senator SHIPSTEAD. Of course, the figures I assumed merely for the purpose. For instance, an English ship coming in under the English flag, carrying passengers from all over Europe, the passengers would be accredited to England?

Senator WILLIS. The way they handled ships in those days that would not be a bad guess, because they did not have tramp vessels gathering up cargo. A ship was laden and went to a certain port.

Senator REED. Your conclusions upon that were checked, were they not, by statistics of emigrants from various countries?

Doctor HILL. So far as we could get them.

Senator SHIPSTEAD. Could you get them in any extended form for those days of 1850?

Doctor HILL. For some countries we have statistics of emigration from Provinces and counties, and of others we haven't found any yet.

Senator SHIPSTEAD. In what countries did you get those?

Doctor HILL. In the case of Ireland, we had the emigration by counties and in the case of Germany we had it by Provinces.

Senator COPELAND. Is it not quite apparent, Mr. Chairman, that we might refine and verify these figures by the use of more time? Doctor Hill says so; and out of these discussions it would seem to me more light might be thrown upon the subject.

Senator KEYES. I submit for the record a letter by Senator BRUCE, of Maryland, to Senator JOHNSON, under date of March 14, 1928, inclosing protest of the Independent Citizens' Union of Maryland, and ask that both be inserted in the record at this point.

(The letter and inclosure referred to, as directed by Senator KEYES, are here inserted:)

UNITED STATES SENATE,
March 14, 1928.

Hon. HIRAM W. JOHNSON,
United States Senate.

DEAR SENATOR: At the request of Dr. Robert H. Haase, president of the Independent Citizens' Union of Maryland, I am forwarding to you herewith a copy of a protest which the members of the union have made against the quota provision of the immigration bill.

Truly yours,

WM. CABELL BRUCE.

A PROTEST AGAINST THE QUOTA PROVISION OF THE NEW IMMIGRATION BILL

To the Congress of these United States:

We, members of the Independent Citizens' Union of Maryland, an organization of citizens of immigrant origin whose loyalty has stood every test in the time of trouble and whose patriotism is unimpeachable, having a political conscience equal to their civic honesty, protest the

so-called "quota" provision in the new immigration measure now before Congress—

For that the provision thereof is arbitrary, unequal, unfair, and unreasonable.

For that the passage of this measure is a reflection upon the courage and the intelligence of the people of the United States and is a confession of fear that they are morally and mentally weak and have lost the virility that marked their immigrant ancestors so now dread and shun to compete with the newcomer of like proportions.

We protest the passage of this bill because we believe in the future of this our country, for as we know that its greatness was achieved by the pioneer immigrants and their descendants, so do we welcome their successors of to-day, as we are convinced that these will equally contribute to the greatness and well-being of our country of the to-morrow.

Because we so believe, and because we possess courage in ourselves and a grateful memory for those who prepared the way for us, we oppose this quota provision as prejudicial to the best interests of the United States and of its welfare.

Respectfully submitted.

THE INDEPENDENT CITIZENS UNION OF MARYLAND,
By Dr. ROBT. H. HAASE, *President.*

Senator KEYES. The committee will now go into executive session.

(Whereupon, at 3 o'clock p. m., the committee proceeded to the consideration of executive business, and at the conclusion thereof adjourned to meet at the call of the chairman.)

Mr. SHIPSTEAD. I ask unanimous consent that the statement made by the senior Senator from Minnesota before the Immigration Committee of the Senate be printed in connection with Doctor Hill's statement. I should like to have the two views fully set out for the information of those who desire to consider the question.

The PRESIDING OFFICER. Is there objection?

There being no objection, the matter was ordered to be printed in the RECORD, as follows:

Senator SHIPSTEAD. I have prepared a condensed résumé, which is the result of a great deal of study of the so-called "national origin" clause of the immigration act, and I will go through it as hurriedly as I can, because I think it ought to be in the record for the consideration of the committee.

The CHAIRMAN. All right, sir.

Senator SHIPSTEAD. As I go along with this statement, in order to save time and not impose upon the committee, if you care to ask me any questions I will be very glad to answer them.

Mr. Chairman and gentlemen of the committee, S. 4425, which I introduced June 8 last, seeks to amend sections 11 and 12 of the immigration law of 1924. The amendment is in the form of a redraft of said sections. The object of this amendment is to repeal the so-called "national origin" method of determining the annual immigration quota from each country to take effect July 1, 1927, as set forth in paragraph (b) said section 11, so that thereafter the annual quota of immigrants from any country shall continue to be the same as at present, viz, 2 per cent of the number of foreign-born individuals of such nationality resident in continental United States as determined by the United States census of 1890. In redrawing said sections 11 and 12, I have endeavored to eliminate therefrom all that relates to the "national origin" provisions, both in regard to the numerical limitations and also in regard to the administration of the immigration law, but to retain therein all that relates to the administration of the law under the quota as provided for in paragraph (a), section 11.

My reason for asking for the elimination of the "national origin" method to determine the quota of each country is that I find that we have not sufficient official or other data upon which to determine the quota of each country upon this basis and that it would lead to discrimination between different nationalities, which is just what Congress diligently endeavored to avoid in passing the immigration act of 1924. I might say also that the reason I voted against the immigration law when it came back from the House and from the conference is because I began to have an inkling of where this would lead us. I have given considerable study to the matter since, and I have come to the conclusion, and I think every one of you who look into it will come to the conclusion, that there is no basis upon which this can be reckoned to determine what is the "national origin" of the various groups. Therefore the yardstick by which we measure under this provision is not based on anything about which we have exact information.

The purpose of the "national origin" plan is to divide all immigrants exactly in accordance with the "national origin" of our population so as to eliminate charges of discrimination. If this could be done, it might be an ideal plan.

Paragraphs (b) and (c) of said section 11 read as follows:

"(b) The annual quota of any nationality for the fiscal year beginning July 1, 1927, and for each fiscal year thereafter, shall be a number which bears the same ratio to 150,000 as the number of inhabitants in continental United States in 1920 having that national origin (ascertained as hereinafter provided in this section) bears to the number of inhabitants in continental United States in 1920, but the minimum quota of any nationality shall be 100.

"(c) For the purpose of subdivision (b) national origin shall be ascertained by determining as nearly as may be, in respect of each geographical area which under section 12 is to be treated as a separate country (except the geographical areas specified in subdivision (c) of section 4) the number of inhabitants in continental United States in 1920 whose origin by birth or ancestry is attributable to such geographical area. Such determination shall not be made by tracing the ancestors or descendants of particular individuals, but shall be based upon statistics of immigration and emigration, together with rates of increase of population as shown by successive decennial United States censuses, and such other data as may be found to be reliable."

It will be seen from the above that the most important element in this determination is "statistics of immigration and emigration." The next important element is "rates of increase of population as shown by successive decennial United States censuses."

As reliable statistics of immigration and emigration are not in existence the whole plan fails and leaves the determination to mere guesswork or conjecture.

Senator REED. In the absence of statistics, you say?

Senator SHIPSTEAD. Yes; I say "reliable statistics" are not available. According to the best authorities, there are no reliable statistics of immigration for the first 213 years of this country's history. I believe you stated in the debate upon this proposition that there were none until 1820?

Senator REED. Yes.

Senator SHIPSTEAD. I am quoting from your statement on the floor of the Senate, April 3, 1924, page 5460, part 6, volume 65, of the CONGRESSIONAL RECORD: "There was no official governmental record of immigration commenced until the year 1820."

Dr. Edward McSweeney, former Assistant Commissioner of Immigration, has made a statement on that, and if you would care to have me do so I would like to read it. He said [reading]:

"In 1819 a law was passed making it necessary for the captains of all incoming ships, bringing passengers to the United States, to file a manifest of the passengers, but except to give the number of the passengers to the Government was never other than perfunctory and almost never used. These accumulated manifests were burned in the Ellis Island fire of 1896. The first real attempt to gather immigration statistics was after the Immigration Bureau was established in the early nineties."

So that brings us down to 1896, if that statement is correct.

Senator REED. Not necessarily, because the statistics were copied and compiled, or for many decades before that, and appear in the Government reports here in Washington.

Senator SHIPSTEAD. Considerable emphasis has been laid on the fact that a census was taken in the year 1790 and that this census can be used as a basis for determining the "national origin" of the inhabitants of the United States in that year, but this census is of no value for that purpose, because only names and ages were given in this census and no information can be secured as to nationality or "national origin."

In 1906 Congress passed a law providing that the Director of the Census be authorized and directed to publish in permanent form, by counties and minor subdivisions, the names of the families returned at the First Census of the United States in 1790.

Speaking of the difficulties in this work, William S. Rossiter, then chief clerk of the Census Bureau, stated in Outlook for December 29, 1906, page 1071, with reference to the correspondence between the Secretary of State and the marshals in the different districts who had charge of the census:

"The break in official records is one of the marks of the teeth of the British lion, these papers and many others having been destroyed during the occupation of Washington in the War of 1812."

Mr. Rossiter also states:

"Vagaries of size, shape, paper, ruling, chirography, and language could easily be forgiven if, however, thereby we could restore the missing schedules for Delaware, Georgia, Kentucky, New Jersey, Tennessee, and Virginia, another reminder of the British, for they were also destroyed during the occupation of Washington."

Mr. Rossiter estimates that one-fourth of the enumeration is now lacking and that it would be very difficult to comply with the law of 1906.

Director of the Census North was not seemingly deterred by the fact that such a large part of the records was missing and proceeded in 1909 to make a voluminous report, which not only used the partial records but gave meticulous percentages of the racial divisions in the country based solely on names, the same as the late Senator Lodge has done in his Distribution of Ability in 1896. Well, certainly the recklessness of that would be apparent; for instance, here is a man by the name of Murphy; suppose he marries a girl of German descent. What would the children be? If you go by name, of course they would be called Irish; the German would be wiped out. If an Irish girl should marry a man with a German name, a Scotch name, or Scandinavian name, the Irish descent would be wiped out.

Senator REED. Would not these instances pretty well cancel one another?

Senator SHIPSTEAD. I think that may be. But, of course, in the absence of any statistics from such a large part of the United States down to recent date, I think while that may be true that one would cancel the other, I should rather think that the larger would absorb the smaller, and the smaller would finally be entirely wiped out. The proportion would not be kept, and, as I understand it, the function of this clause was to keep the origin in about the same proportion, if it could be determined.

This North report has been used in the tentative tables to show what each country would get under the "national origin" clause in the immigration act of 1924.

Several eminent scholars have written extensive articles for the magazines showing the futility of trying to arrive at the "national origin" of the white inhabitants of the United States, among which are mentioned Dr. Edward F. McSweeney, former assistant immigration commissioner at New York, and Dr. Roy L. Garis, professor of economics in Vanderbilt University.

I quote from Doctor Garis's article in the Saturday Evening Post for October 10, 1925:

"The 'national origin' plan means, therefore, that we must abandon practical methods and adopt something which we do not know anything or at best very little about." (Saturday Evening Post, p. 233, October 10, 1925.)

John B. Trevor, in his statement before the Senate Committee on Immigration, page 90, Senate hearings, 1924, stated:

"It has been suggested that the adoption of the 1890 census in lieu of that of 1910 will accomplish an equitable apportionment between the emigration originating in northwestern Europe and in southern and eastern Europe, respectively. This principle has been embodied in the House committee bill now before Congress. On the other hand, it is alleged that the selection of the census of 1890 as the basis for the computation of quotas, discriminates unjustly against immigration from what is called the newer sources of supply. Since the late arrivals are in all fairness not entitled to special privilege over those who have arrived at an earlier date and thereby contributed more to the advancement of the Nation, the obvious solution of the problem lies in the racial analysis of the population of the United States. The difficulties of such a proceeding are obviously very great, and the results, owing to the lack of complete data compiled in the earlier decennial enumerations made by our Government, can therefore only approximate the truth."

I want to say this for Mr. Trevor: He has been criticized and blamed for whatever there has been done in trying to figure this out. I can not find anywhere that Trevor spoke in favor of the "national origin." He was contending all the time that the quota of 1890 was the most fair and would cause the least discrimination against any nationality. That is the gist of his argument from beginning to end, as I read it in the hearings and wherever I find him quoted.

Senator REED. I think the explanation of that is that the "national origin" clause had not been suggested at the time he testified.

Senator SHIPSTEAD. That may be.

Senator REED. The idea, whether a good one or bad one, I think, originated with myself. Trevor had never heard the suggestion.

Senator SHIPSTEAD. I think the idea is a good one if you can find a basis upon which to figure it out.

Senator REED. Of course, the theory of it was an effort to be entirely fair to everybody and try to be impartial.

Senator SHIPSTEAD. Yes; I think so.

Senator REED. I have no pride of authorship in it, and I am very concerned in seeing how it will work out. If it is impracticable, I think we ought to repeal it.

Senator SHIPSTEAD. After I talked to you the other day I thought you would be interested in getting it correct.

Senator REED. Yes; I am.

Senator SHIPSTEAD. This goes into effect next year, unless something is done either to stop the presidential order or to repeal this act.

That is the only statement that I can find by Trevor on this proposition, but I think it is very significant. Now, he goes on to say:

"Nevertheless, such an approximation is of infinite value in demonstrating the falsity of the charges made by those whose interests and sympathies lie abroad rather than in the country of their adoption."

And I absolutely agree with him. I think he is right when he says that the quota of 1890 would be the most fair and cause the least discrimination to any group.

Senator REED. Senator, you agree with this, do you not, that if it is possible from a practicable standpoint to base the quotas on the whole population of the United States it ought to be done rather than to base them only upon the foreign born in any particular year; in other words, there is no reason why we who were born here should not be reflected in the quota if it can be done?

Senator SHIPSTEAD. I think that is right, if it can be done; then, I think it is perfectly right.

I shall not take up the time of the committee in quoting from persons outside of Government service, but will call the attention of the committee to statements on this question made by persons who are charged with the administration of this law.

On May 8, 1924, Congressman SABATH, one of the House conferees, stated in reference to paragraph (b), section 11 (CONGRESSIONAL RECORD, p. 8138, pt. 8, vol. 65):

"Both the Director of the Census, Mr. Steuart, and Doctor Hill, first assistant, who appeared before the managers, declared that they would be obliged to adopt arbitrary methods to arrive at the proper basis upon which allocation will be based."

Commissioner General of Immigration Hull in his annual report for 1925 (p. 29) states:

"Thirteenth: Section 11 provides at the present time for an annual quota for each nationality of 2 per cent of the number of foreign-born individuals of such nationality resident in continental United States as determined by the census of 1890, with a minimum quota of 100, and further provides that beginning July 1, 1927, and for each fiscal year thereafter, the allotment shall be determined according to national origin. The bureau feels that the present method of ascertaining the quotas is far more satisfactory than the proposed determination by national origin, that it has the advantages of simplicity and certainty. It is of the opinion that the proposed change will lead to great confusion and result in complexities, and accordingly it is recommended that the pertinent portions of section 11, providing for this revision of the quotas as they now stand, be rescinded."

In the Saturday Evening Post for October 10, 1925, Doctor Garis quotes Director Steuart as making a statement on June 24, 1925 (p. 233):

"That there are no figures in existence which show completely the national origin of the population of the United States."

After thoroughly considering the question of whether or not the census of 1910 or the census of 1890 should be used as a quota basis, Congress came to the conclusion that the census of 1890 eliminated all discrimination in favor of either the new or the old immigration as far as each type had contributed to our make-up of the different nationalities. It may be true that the old and the new immigration gets about the same percentage of the total under either method, but it is when we come to divide the quota between the several countries in each group that the discrimination comes in when we try to apply the "national origins" method under what we have so far learned as to the distribution under the "national origins" method, and especially under the tables that were used before the Senate and House Committees on Immigration and before the conference committee.

The 1890 basis is a practical law and is based upon definite statistics, but, as I have heretofore stated, the "national-origin" plan means that we must abandon a practical method and adopt something about which we do not know anything, or, at least, very little.

The Senate and House during the first session of the Sixty-eighth Congress expended a great deal of time on different immigration bills, but there were several other important features in addition to the quota limitations that had to be considered and occupied a great deal of time. Of these I might mention the Japanese exclusion, alien seaman question, and nonquota immigrants. The necessity of passing a law during that session was very important, as the law then in effect would soon expire and we were threatened with being flooded with immigrants from many European countries. The House passed H. R. 7955, which provided for a quota of 2 per cent, according to the census of 1890. On April 2, 1924, the Senate took up for consideration Senate bill 3576, which provided for a quota of 2 per cent of the census of 1910. The bill as reported contained a large number of amendments proposed by the Senate committee and a large number of amendments were offered on the floor of the Senate, among which was the amendment offered by the Senator from Pennsylvania [Mr. REED], known as the "national origin" amendment now contained in paragraph (b), section 11. After the introduction of the "national origin" amendment the time of the Senate was occupied with several other amendments which came in thick and fast, and the parliamentary situation on the floor of the Senate was described by the late Senator from Illinois, Mr. McCormick, on page 6542, part 7, volume 65, as "the parliamentary mosaic which has been laid out by those in charge of the bill."

The Senate agreed on the 2 per cent of the census of 1890; then took up for consideration the "national origin" amendment. Outside of the statement of the Senator from Pennsylvania [Mr. REED] there was very little discussion on this amendment, and it was adopted without a record vote. (CONGRESSIONAL RECORD, p. 6472, pt. 7, vol. 65.) The revised text of this amendment is found on page 6471, part 7, volume 65, CONGRESSIONAL RECORD.

You remember, Senator REED, that when this came up in the Senate there were a great many amendments proposed, and I noticed in the debates on this subject that you were practically the only one who said anything. I do not think anybody else was familiar with it.

Senator REED. Senator Lodge spoke in favor of it, I believe.

Senator SHIPSTEAD. Congress has been criticized a great deal for putting it in. I think that the Congress had very good intentions.

After it had come back from the House and come back from the conference I was beginning to think that we were going to drift far into the sea on it, and that is the main reason I voted against the immigration bill.

What information did the Senate have as to the effect of this amendment before it was adopted?

Mr. John B. Trevor appeared at the hearings before the Senate committee (p. 89, Senate hearings), and submitted a statement and a table that he had prepared entitled "Preliminary Table, Subject to Revision." A copy of this table will be found in Exhibit A attached hereto. This table shows what each European country would receive as an immigrant quota on a basis of one-fifth of 1 per cent and one-fourth of 1 per cent based on "national origin," and what it will receive under H. R. 6540, or 2 per cent of the census of 1890, and under the law in force at that time. But this table does not show what each country would receive after the total immigration is limited to 150,000 and divided between each country according to the proposition stated in the Reed amendment.

Senator REED. There were lots of tables put in the record, though, based on Trevor's decision between nation and nation; I think you will find them——

Senator SHIPSTEAD. That is, figuring the immigration total at 150,000?

Senator REED. Yes.

Senator SHIPSTEAD. I found three tables.

Senator REED. Figuring on a basis of 300,000 and I think 150,000.

Senator SHIPSTEAD. Here is one on the basis of 300,000 that you put into the record—from a speech made by Mr. Curran, of New York.

Senator REED. Yes.

Senator SHIPSTEAD. That is on the basis of 300,000. Here is another one. These are the Trevor figures, as I understand them.

The CHAIRMAN. Do you wish them inserted as a part of your remarks, Senator?

Senator SHIPSTEAD. Yes.

The CHAIRMAN. They will be inserted.

Senator SHIPSTEAD. And here is the only table I could find based upon annual immigration of 150,000.

The CHAIRMAN. Whose table is that?

Senator REED. That is the one I meant.

Senator SHIPSTEAD. That is the one you meant?

Senator REED. Yes.

Senator SHIPSTEAD. I find it on page 8138, part 8, volume 65, CONGRESSIONAL RECORD. This table was printed in the RECORD after the immigration bill had passed the Senate.

The CHAIRMAN. That will be inserted as part of your remarks also, Senator.

If any person wanted to determine what quota any particular country would receive under the Reed amendment, he would have to assume that the Trevor tables would be used and then resort to the arithmetical method known as the "double rule of 3." For example: If he wanted to ascertain the quota of Sweden, he would have to make out the equation, ———: 150,000 : : 2,285,666 : 92,386,237.

Multiplying the means and dividing by the known extreme we get for the answer 3,712.

No table was before the Senate in which the quota each country would receive under the Reed amendment was computed.

There is a table on page 5476, part 6, volume 65, CONGRESSIONAL RECORD, showing what each country would receive under 2 per cent of 1890, 2 per cent of 1910, and under the "national origin" method, but when you examine this table more closely you will find that this table as to the "national origin" method is based upon a total annual immigration of 300,000 while the Reed amendment provides for only 150,000, and it is very unfair to compare what each country would get under 2 per cent of the 1890 census where the total immigration would amount to only 161,990 with the "national origin" method based on 300,000. According to this table Denmark would get 2,782 under the 2 per cent of 1890 method and 2,183 under the "national origin" method, but when you reduce the annual immigration to 150,000 the quota for Denmark would be only one-half of what is shown on this table. Take Germany—under the quota of 1890 basis she would get 50,129; under the "national origin" method as shown on this table, 44,035; but under the Reed amendment only about 22,000. Take the quota of Norway—under the 1890 basis, 6,453; under this table, 4,866; but under the Reed amendment only one-half, or 2,433. Thus Norway and Sweden would lose about two-thirds of the quota under the 2 per cent of the 1890 method.

These tables did not give anything with reference to the Irish Free State.

I think when you spoke in the Senate you had the total immigration quota of 300,000, because I see when you take that basis then there is not much difference between the quota under this national origin clause and the law of 1890; but when we take 150,000 there is a great deal of difference; and I think you overlooked that.

Senator REED. It cuts it in half. The amendment cutting the quota to 150,000 was made, as I recall it, by Senator HARRISON.

Senator SHIPSTEAD. Was that made after you introduced your amendment?

Senator REED. Yes. The "national origin" amendment, as I introduced it, called for a Swedish quota of approximately 7,400 and a total immigration of 300,000. As I recall it, the amendment so introduced to my amendment by Senator HARRISON was carried by the Senate to make it a total of 150,000.

Senator SHIPSTEAD. I find here that Senator ROBINSON asked you this question, page 5468, part 6, volume 65, CONGRESSIONAL RECORD: "Has the Senator investigated to ascertain how that would work out in practical results, as compared with the proposal to base the quota on the 1890 census, or the proposal which he himself submitted?" And your reply was: "Yes, Mr. President; I have. There is almost no difference between the result of the 1890 method and the result of the proposal I have just been outlining."

On May 8, 1924, Congressman SABATH had printed in the RECORD (p. 8138) a table which he claims had been used before the conference committee by the Senator from Pennsylvania. This table tells an entirely different story from the table that was printed on page 5476.

Mr. Trevor has been criticized very severely on account of the tables that he had prepared, but in justice to Mr. Trevor, I will call the attention of the committee to his statement before the Senate committee, which is printed on page 89 of Senate hearings, 1924, from which I will quote the following:

"I am convinced, speaking broadly, that H. R. 6540 gives the elements who are most vociferous in their charges of discrimination more than they could hope for if it were possible for the Census Bureau to make an accurate apportionment of the racial strains in solution throughout our population to-day. Theoretically a quota based on such an analysis is ideal; but practically it would be a matter of great difficulty to construct a table of apportionment which would not be under fire year in and year out."

H. R. 6540 referred to by Mr. Trevor above provides for a quota based on 2 per cent of the census of 1890.

In a speech at the Hotel Astor March 25, 1924, before the Economic Club, Hon. Henry H. Curran, commissioner of immigration at Ellis Island (see CONGRESSIONAL RECORD, p. 5475, pt. 6, vol. 65). stated:

"If we drop the 1910 measure and take up the 1890 measure, we come, with a few minor differences in the case of individual nations, to a measure that almost exactly gives each part of Europe that to which it is entitled. No more and no less. That is why I am for the 1890 measure. It helps us to become more homogeneous by sending to us every year a miniature or replica of that which we are already, according to original national stock. The 1890 measure is the soundest, the healthiest, the fairest, and the best. I hope you will write to your Senators and Congressmen and tell them so."

I respectfully call the attention of the committee to the constitutional features of the "national origin" method. Congress has no doubt the power to adopt any arbitrary quota it may see fit and has the power to delegate to some commission or executive officers the power to determine the immigration quota of each country from facts and figures that may be established before such commission or officers, but when Congress attempts to confer upon a commission or executive officer of the Government the power to fix arbitrarily the quota for each country, has not Congress exceeded its powers in delegating to such board or officers a part of its legislative functions?

Senator REED. There is a bigger question even than the Senator suggests, and that is that Congress and every Member of Congress wants to be fair.

Senator SHIPSTEAD. Oh, sure.

Senator REED. And impartial in regard to these nationalities.

Senator SHIPSTEAD. Oh, yes; I do not think anybody questions that.

Senator REED. The figures calculated on the "national-origin" basis are now in course of completion, I am told, and will be available to us immediately after we reassemble in January, and I think that the committee expects then to take up energetically and thoroughly this question.

Senator SHIPSTEAD. Thank you.

The CHAIRMAN. The committee will now go into executive session.

(Thereupon, at 11.30 o'clock a. m., the committee proceeded to the consideration of executive business and at the conclusion thereof adjourned to meet at the call of the chairman.)

Mr. HEFLIN. Mr. President, of course we all know that the prohibition law is not being enforced as well as we should like to have it enforced. There are a great many laws upon the statute books that are not being enforced. They are doing a great deal of good; but we do not repeal these other laws because they are not enforced perfectly. I should think that the recent election would serve notice upon the country generally that the people of the United States have not any idea of repealing our prohibition statute or of disturbing the eighteenth amendment.

I rose particularly to reply to the speech of the Senator from Mississippi [Mr. HARRISON], who hugs to his breast the delusion that the immigration question is no longer a serious question in

our country. Let not the Senator from Mississippi deceive himself. I know something about the immigration law and how it came to be in effect. I was in the House when we fought to cut down immigration from a million and a quarter a year to about 300,000, as we have it now. I know of the obstacles that we encountered, and I know the group that opposed it at every step.

Governor Al Smith is not for restricted immigration. He never has been for restricted immigration. In the campaign which recently closed so disastrously to him and in some respects to the party, he did try to say about what Mr. Hoover said, after Hoover said it first. He was desirous of getting votes; he wanted to get elected, and of course his group that has always opposed restricted immigration in America was lying low upon that subject in this particular campaign. But I want the Senator from Mississippi to know that there are those of us who understand this question, and understand the elements in America that are not in favor of the American viewpoint upon immigration.

The Senator from Mississippi can not lull anybody to sleep by the suggestion that the immigration question is no longer a serious question in America. I will tell you, if you want me to, how this bill became a law. It became a law by the southern Democrats and the western Republicans uniting and voting for it. That is the way it became a law; and we are going to protect and preserve that law in its integrity. We are not going to turn over this country yet to a horde of unfit foreigners to come in here and take the places of American boys and girls who are to work out their own salvation and make their own living in the various fields of human endeavor. We have a right to say just who shall come here. We have a right to decide for ourselves who shall make up the citizenship of this country.

If the Senator from Mississippi will go back and read in the RECORD the proceedings in the House, he will find that when we had restricted immigration measures up, not one but all of them, the so-called Tammany Democrats voted against them. They always voted against them. They fought them to the bitter end, and if we had relied upon support from that element in the Democratic Party we would not have had any immigration law yet. The Democrats of the South and the Republicans of the West are the ones who put this law upon the statute books; and we are going to remain on guard. We are not going to have any serious inroads made upon this law. We are going to tighten it up rather than loosen it up.

I do not want anybody to get the impression from what the Senator from Mississippi said that any element coming into power would safeguard our immigration interests in the United States. It is not true. Those who compose one group of our citizens are fundamentally in favor of open and unrestricted immigration, not only to increase membership in their church but to increase their political power in the United States. It is a part of their religious program, and I am not in favor of giving them power to control this immigration question. That was one of the great questions in the recent campaign. Governor Smith, in his acceptance speech, said that the law ought to be changed in certain particulars. We knew exactly in what particulars he wanted it changed. After Mr. Hoover made his statement in Tennessee to the effect that he did not want the number increased, Governor Smith, hoping to get some support from the people who want restricted immigration, then said that he occupied the same position.

Mr. President, Governor Smith and that whole Tammany group are not in favor of restricted immigration. If they had their way about it, they would open the doors; they would change the law altogether and bring in more people here from southern Europe. We do not want to have that done, and that is not all; we are not going to permit it to be done.

The PRESIDING OFFICER (Mr. VANDENBERG in the chair). The resolution presented by the Senator from Pennsylvania will be referred to the Committee on Immigration.

HOUSE BILLS REFERRED

The following bills were severally read twice by their titles and referred to the Committee on Naval Affairs:

H. R. 5528. An act to enable electricians, radio electricians, chief electricians, and chief radio electricians to be appointed to the grade of ensign;

H. R. 7209. An act to provide for the care and treatment of naval patients, on the active or retired list, in other Government hospitals when naval hospital facilities are not available;

H. R. 8537. An act for the relief of retired and transferred members of the Naval Reserve Force, Naval Reserve, and Marine Corps Reserve;

H. R. 11616. An act to authorize alterations and repairs to certain naval vessels;

H. R. 13884. An act to authorize the Secretary of the Navy to proceed with the construction of certain public works, and for other purposes; and

H. R. 14039. An act to regulate the distribution and promotion of commissioned officers of the line of the Navy, and for other purposes.

REPORT OF THE COUNCIL OF THE NATIONAL DEFENSE

The PRESIDING OFFICER laid before the Senate the following message from the President of the United States, which was read, and, with the accompanying paper, referred to the Committee on Military Affairs:

To the Congress of the United States:

In compliance with paragraph 5, section 2, of the Army appropriation act approved August 29, 1916, I transmit herewith the Twelfth Annual Report of the Council of National Defense for the fiscal year ended June 30, 1928.

CALVIN COOLIDGE.

THE WHITE HOUSE, *December 6, 1928.*

REPORT OF NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS (S. DOC. 178)

The PRESIDING OFFICER laid before the Senate the following message from the President of the United States, which was read and, with the accompanying report, referred to the Committee on Naval Affairs and ordered to be printed:

To the Congress of the United States:

In compliance with the provisions of the act of March 3, 1915, establishing the National Advisory Committee for Aeronautics, I submit herewith the fourteenth annual report of the committee for the fiscal year ended June 30, 1928.

The attention of the Congress is invited to Part V of the committee's report presenting an outline of the present state of aeronautical development. It is encouraging to note from the committee's report that not only has aeronautic progress been at an accelerated rate within recent years, but the progress has been greater in 1928 than in any single previous year. The significance of this to the American people and to the advancement of civilization can but faintly be pictured in the light of the amazing development that has characterized the first 25 years of aviation.

This country may well be proud of the contributions it has made to this remarkable development, and I am satisfied that continued support of proven policies will assure the further progress of American aviation. I concur in the committee's opinion that there is need for continuous prosecution of scientific research in order that this progress may continue at the maximum rate.

CALVIN COOLIDGE.

THE WHITE HOUSE, *December 6, 1928.*

CHRISTOPHER COLUMBUS MEMORIAL LIGHTHOUSE (H. DOC. NO. 456)

The PRESIDING OFFICER laid before the Senate the following message from the President of the United States, which was read, and, with the accompanying papers, referred to the Committee on Foreign Relations and ordered to be printed:

To the Congress of the United States:

I transmit a report from the Secretary of State on the subject of the Christopher Columbus Memorial Lighthouse to be erected by the Governments and peoples of the Americas on the coast of the Dominican Republic at Santo Domingo, and commend to the favorable consideration of the Congress the recommendation of the Secretary of State, as contained in the report that legislation be enacted authorizing the appropriation of the sum of $871,655 as the share of the United States in this project.

CALVIN COOLIDGE.

THE WHITE HOUSE, *December 6, 1928.*

INTERNATIONAL CONGRESS OF MILITARY MEDICINE AND PHARMACY (H. DOC. NO. 455)

The PRESIDING OFFICER laid before the Senate the following message from the President of the United States, which was read, and, with the accompanying papers, referred to the Committee on Foreign Relations and ordered to be printed:

To the Congress of the United States:

I transmit herewith a report by the Secretary of State recommending, at the request of the Secretary of the Treasury, the Secretary of War, and the Secretary of the Navy, constituting, together with the Surgeons General of the three medical services of the Treasury, War, and Navy Departments, an advisory board under the Federal act to incorporate the Association of Military Surgeons of the United States, approved January 30, 1903, that Congress be requested to authorize an appropriation of $5,000 for the payment of expenses of delegates

of the United States to the Fifth International Congress of Military Medicine and Pharmacy to be held at London, England, in 1929.

The recommendation has my approval, and I request of Congress legislation authorizing an appropriation of $5,000 for the purpose of participation by the United States by official delegates in the Fifth International Congress of Military Medicine and Pharmacy to be held in London in 1929.

CALVIN COOLIDGE.

THE WHITE HOUSE, *December 6, 1928.*

REPORT OF THE GOVERNOR OF THE PANAMA CANAL

The PRESIDING OFFICER laid before the Senate the following message from the President of the United States, which was read, and, with the accompanying report, referred to the Committee on Interoceanic Canals:

To the Congress of the United States:

I transmit herewith for the information of the Congress, the annual report of the Governor of the Panama Canal for the fiscal year ended June 30, 1928.

CALVIN COOLIDGE.

THE WHITE HOUSE, *December 6, 1928.*

REPORT OF THE ALASKA RAILROAD

The PRESIDING OFFICER laid before the Senate the following message from the President of the United States, which was read and referred to the Committee on Territories and Insular Possessions:

To the Congress of the United States:

I transmit herewith for the information of the Congress, the annual report of the Alaska Railroad for the fiscal year ended June 30, 1928.

CALVIN COOLIDGE.

THE WHITE HOUSE, *December 6, 1928.*

NOTE.—Report accompanied similar message to the House of Representatives.

ACTS, ETC., OF THE PHILIPPINE LEGISLATURE

The PRESIDING OFFICER laid before the Senate the following message from the President of the United States, which was read, and, with the accompanying documents, referred to the Committee on Territories and Insular Possessions:

To the Congress of the United States:

As required by section 19 of the act of Congress approved August 29, 1916, entitled "An act to declare the purpose of the people of the United States as to the future political status of the people of the Philippine Islands and to provide a more autonomous government for those islands," I transmit herewith a set of the laws and resolutions adopted by the Seventh Philippine Legislature during its third session, from July 16 to November 9, 1927.

CALVIN COOLIDGE.

THE WHITE HOUSE, *December 6, 1928.*

ACTS, ETC., OF THE PORTO RICAN LEGISLATURE

The PRESIDING OFFICER laid before the Senate the following message from the President of the United States, which was read, and, with the accompanying document, referred to the Committee on Territories and Insular Possessions:

To the Congress of the United States:

As required by section 23 of the act of Congress approved March 2, 1917, entitled "An act to provide a civil government for Porto Rico, and for other purposes," I transmit herewith copies of the laws and resolutions enacted by the Eleventh Legislature of Porto Rico during its third regular session (February 13 to April 15, 1928).

These acts and resolutions have not previously been transmitted to the Congress and none of them has been printed as a public document.

CALVIN COOLIDGE.

THE WHITE HOUSE, *December 6, 1928.*

PETITIONS AND MEMORIALS

The VICE PRESIDENT laid before the Senate a communication from the Niagara Falls (N. Y.) Chamber of Commerce, relative to the shooting of Jacob D. Hanson by Government agents, and suggesting that his relatives be reimbursed therefor, which was referred to the Committee on Claims.

Mr. WARREN presented resolutions adopted by the Turkey Growers Conference held at Casper, Wyo., favoring an increase in the tariff duties on the importation of turkeys, which were referred to the Committee on Finance.

He also presented resolutions adopted by the Chamber of Commerce of Dubois, Wyo., favoring the passage of legislation providing for aided and directed settlement on Federal reclamation projects, which were referred to the Committee on Irrigation and Reclamation.

He also presented a statement of the State Board of Equalization of Wyoming favoring amendment of section 5219, Revised Statutes, as amended, relative to the taxation of national banks, which was referred to the Committee on Banking and Currency.

He also presented a resolution adopted by the Ladies' Literary Club, of Evanston, Wyo., favoring the ratification of the so-called multilateral treaty for the renunciation of war, which was referred to the Committee on Foreign Relations.

Mr. COPELAND presented a resolution adopted by the council of the city of Long Beach, N. Y., indorsing the proposed deepening and widening of East Rockaway Inlet, which was referred to the Committee on Commerce.

He also presented resolutions adopted by the sixty-fifth annual convention of the New York Federation of Labor at Rochester, N. Y., favoring the passage of the so-called Cooper-Hawes bill relative to prison-made goods, which were referred to the Committee on Interstate Commerce.

He also presented a petition of sundry members of the Presbyterian Church, of Little Falls, N. Y., praying for the adoption of measures for the outlawry of war, which was referred to the Committee on Foreign Relations.

He also presented the petition of Rev. Henry A. Dexter, rector of All Saints Episcopal Church, and Harriet Miller Dexter, of Briarcliff, N. Y., praying for the ratification of the so-called multilateral treaty renouncing war, which was referred to the Committee on Foreign Relations.

Mr. COPELAND. I ask that there may be printed in the RECORD at this time a letter from the National Council of Jewish Women with a statement regarding the identification cards for aliens which are being issued by the Bureau of Immigration. It has a bearing on the immigration question and I desire to have it printed in the RECORD.

There being no objection, the letter and the accompanying paper were referred to the Committee on Immigration and ordered to be printed in the RECORD, as follows:

THE NATIONAL COUNCIL OF JEWISH WOMEN,
DEPARTMENT OF IMMIGRANT AID,
The City of New York, December 4, 1928.

Senator ROYAL S. COPELAND,
250 West Fifty-seventh Street, New York.

DEAR SENATOR COPELAND: You will recall that in a letter you wrote to us recently concerning the identification cards, which are being issued by the Bureau of Immigration of the Department of Labor, you asked us to call your attention to any possible danger which the use of these cards might entail.

In accordance with your request and for your information, we are inclosing a statement prepared by Mr. Max J. Kohler, which was adopted at the annual meeting of the American Jewish Committee in November, 1928. We feel sure that a careful perusal of this report will convince you that there are some dangers attendant upon this new system of identification cards.

Sincerely yours,

ETTA LASKER ROSENSOHN,
Editor The Immigrant.

IDENTIFICATION CARDS FOR ALIENS

Section of annual report of the American Jewish Committee adopted at the annual meeting, November 11, 1928, prepared by Max J. Kohler

The Commissioner General of Immigration, with the written approval of Acting Secretary of Labor Husband, issued General Order No. 106 last June, going into effect July 1, 1928, for the issuance of "identification cards" for newly arriving aliens. As described by Secretary of Labor Davis himself in a letter to Undersecretary of the Treasury Mills, in answer to a communication from Mr. William Liebermann, of Brooklyn, this new system might prove of some occasional benefit to newly arriving aliens and do little harm other than possibly as an opening wedge for a general "registration of aliens" plan. Secretary Davis expressed himself in similar fashion on other occasions, too. A careful expert examination of the order in question shows, however, that Secretary Davis was himself unaware of very objectionable clauses in the order in question, in no way referred to in his aforesaid letter, and the gravely injurious character of the system is enormously augmented by interviews as to the plan given out by Acting Commissioner General of Immigration Harris, which his superiors do not appear to have disapproved of or limited.

The plan, as described by Secretary Davis, and to that extent in force, provides for identification cards, to serve as governmental proof of lawful residences, to be issued to all newly arriving aliens coming over since July 1, 1928, with the intention of becoming permanent residents and available to them as "certificates of arrival" in order to secure

first and second papers under the naturalization laws and to satisfy prospective employers who often will employ foreign-born persons only who have secured first papers or other official proof of lawful residence, etc. The system provides for the issuance by United States consuls, when issuing immigration visas, of such identification cards to the applicants for visas, to become valid and effective only when signed by an immigrant inspector when the alien is lawfully admitted into the United States. The identification card contains the portrait of the alien, his name, age, country of birth, nationality, color of eyes, name of port of arrival and of steamship, date of admission and status at the time, statement as to whether quota or nonquota immigrant, and the immigrant's own signature. The cards are required to be issued in duplicate and are numbered, and specify the visa number. On arrival the alien must sign the card anew and his two signatures are to be carefully compared. The duplicate is to be retained by the Government officials.

The two ominous clauses in the order, which the Secretary overlooked in his statement, provide as follows:

"The admitted alien should be cautioned to * * * present it for inspection if and when subsequently requested so to do by an officer of the Immigration Service."

Again—

"If and when a warrant of arrest is served upon an alien, admitted to the United States as an 'immigrant' subsequent to July 1, 1928, the identification card should be obtained, if possible, preferably by the immigrant inspector serving the warrant, and it will be retained in the immigration office, where the hearing is conducted until the matter has been decided by the department."

In public interviews the Commissioner General of Immigration frankly disclosed the fact that nonpresentation of such identification cards by persons suspected of having entered recently will be treated as raising a presumption of illegal presence here, and that the bureau plans to issue such identification cards on application to any resident alien establishing his lawful residence here, and not merely to be issued to aliens coming to the United States after July 1, 1928. As the Secretary is permitted to issue a warrant of arrest in deportation proceedings on mere suspicion, in which proceeding the burden of proof to show legal presence here is thrown on the alien by subsisting law, and the Commissioner General's statement (confirmed by the clause of the order as to production of the card whenever demanded) itself is practically tantamount to an instruction to his subordinates to treat nonproduction of the identification card as itself a cause for suspicion, in cases of persons suspected of having entered illegally since July 1, 1928, this scheme amounts in effect to putting a very vicious "registration of aliens" scheme into effect by mere Executive order. Nay more, it involves doing so by almost unparalleled usurpation of legislative authority by these administrative authorities, after the House Committee on Immigration had decided to postpone action on all "registration of alien" bills, even so-called voluntary ones, indefinitely, certainly till after the presidential election was over. As the "order," which the Acting Secretary promulgated, relates only to immigrants arriving since July 1, 1928, only a very small fraction of resident aliens could have such "identification cards," and it would be an an absurdity to draw any unfavorable inferences from nonpossession, except in the cases of persons clearly shown to have arrived since that date, and nothing tantamount to a "registration of alien" system, even voluntary, would be involved. Even thus viewed, however, the clause of the order would be illegal; that the aliens must produce the card to inspectors, whenever demanded, and the Labor Department has no authority thus to legislate, and the further assumption that inspectors can by mere inspection ascertain what alien arrived here since July 1, 1928, is unwarranted and absurd.

When, however, such cards are to be furnished on request to all aliens residing here an entirely different situation arises, and what is in effect a voluntary sweeping "registration of alien" system would be in force by mere Executive fiat. Nay, more; ignorant or biased inspectors would be inclined to draw still more sweeping unfavorable inferences against the alien under suspicion from nonproduction of the card, which are wholly unwarranted, because comparatively few resident aliens would be apt to apply for such cards voluntarily, and a mere handful of our resident aliens would be in possession of such cards compared to the enormous number without them, who would be subjected to such unwarranted adverse inferences, likely to be followed by oppressive and vicious unjustified deportation proceedings.

The clause in the order quoted as to confiscation of the card in case of arrest is, moreover, extraordinary in its oppressiveness and illegality, even if measured by the standards of our barbarous "Chinese-registration" procedure. When arrested in deportation proceedings and subjected therein to a burden of proof provision, the greatest value of the "identification card" would come into play, and to despoil the alien of the card at that period would be most illegal and oppressive. Even under the Chinese exclusion law procedure, such arbitrary despoiling of the aliens was strongly condemned by our courts as illegal and tyrannical. (Toy Tong *v.* U. S., 146 F. 343, at 350 C. C. A.)

This committee, in conjunction with numerous other organizations representing every race and creed, has repeatedly expressed vehement opposition to "registration-of-aliens" projects, whether voluntary or compulsory registration be involved. The president of the committee spoke in no uncertain terms on the subject at a "luncheon conference to discuss registration bills and deportation bills now before Congress" at the Hotel Astor on January 9, 1926, convened by the Conference on Immigration Policy, the Department of City Immigration and Industrial Work Board of National Missions of the Presbyterian Church in the United States, the Department of Immigrant and Foreign Communities, the National Board of the Young Women's Christian Association, the Hebrew Sheltering and Immigrant Aid Society of America, League for American Citizenship, American Civil Liberties Union, and the Council of Jewish Women. The American Federation of Labor has also taken strong ground against the project, and in Labor Letter Federated Press for June 21, 1928, this "identification-card system" is described under the caption Davis Tries Bluffing Aliens Into Blacklist Registration Scheme. The addresses delivered at this conference luncheon were included in a pamphlet edited in 1926 by Max J. Kohler, chairman of the subcommittee on immigration of this body, entitled "The Registration of Aliens a Dangerous Project," an earlier edition of which he published in 1924, and these pamphlets also contain a detailed argument by him on the subject before the House Committee on Immigration and Naturalization January 5, 1923.

This new "identification-card" system is discussed at length in the September–November, 1928, issue of the Immigrant (pp. 9–11) by Senator COPELAND, Mary McDowell, Congressman CELLER, Bruno Lasker, Roger Baldwin, Roy L. Garis, Prof. Henry P. Fairchild, and Prof. Ernest Freund, though they do not appear to have had before them the exact text of the order and of the interviews. We quote from Mr. Lasker's comment the following:

"From what danger, exactly, is the immigrant to be protected by means of the identification card? Obviously the order of July 1, since it applies to an even smaller proportion of the foreign-born residents in the United States than the alien registration bill was intended to bring under the scope of its provisions, increases the chance that legally resident aliens will be harassed by zealous officials. The Secretary of Labor and other sponsors of the order reiterate the motive of 'protection' but have not so far elucidated it. It must be assumed, therefore, that the main purpose of the measure, after all, is that of facilitating the apprehension of those illegally in this country—admittedly a difficult task, and a task which the most 'liberal' immigration policy will want to see more fully accomplished. But I have never been able to see how anything short of a system of registration for the whole population will be really effective. If every man who wears a beard and reads a foreign-language newspaper is to be suspected unless he can produce either an identification paper or a naturalization paper, we shall have more confusion and bungling than ever.

"It seems to me that by issuing this administrative order after an influential section of public opinion had expressed itself as adverse to the embodiment of the same idea in a congressional bill the Secretary of Labor has invited suspicion as to his motives and apprehension as to the probable working of the measure."

PROPOSED REVISION OF OUR NATURALIZATION LAWS

The proposal to revise and codify our naturalization laws, which has been pending for several years, progressed at the last session of Congress when Mr. ALBERT JOHNSON, chairman of the House Committee on Immigration and Naturalization, introduced H. R. bill 9035 and practically simultaneously Senator HIRAM JOHNSON, chairman of the Senate committee, introduced S. bill 2426, the two being identical, except that in a few instances the House bill contains much more stringent provisions, limiting naturalization. The most important objectionable changes in subsisting law made by these bills are—

First. The fees to be paid by the alien are materially increased. While they are now only $5, the House bill raises them to $20 (including $5 for verification of arrival fee), and the Senate bill to $18 (including $3 for verification of arrival fee).

Second. The alien is required to sign the declaration of intention to become a citizen in the English language.

Third. New and more rigid educational qualifications are required after one year which many applicants, particularly women, can not meet. Applicants for citizenship are required to speak and read the English language understandingly and to write in the English language, except in the case of persons physically incapacitated, and homesteaders. Subsisting provisions are also retained, requiring applicants to show their attachment to the Constitution, under which knowledge about United States Government, history, etc., is required, as an implied term.

Fourth. The House bill increases the 5-year residence provision to seven years, and vitiates first papers after seven years.

Fifth. Much more rigid provisions to govern cancellation and expatriation proceedings are included, and erroneous drastic legislative declarations as to subsisting law are included.

Sixth. The minimum age for admission to citizenship is fixed at 21 years.

Seventh. The House bill changes the present law by affirmatively forbidding applicants for naturalization from changing their names.

Eighth. The provisions of the existing law, authorizing naturalization "in the manner provided in this act and not otherwise" are retained in the law, and even extended, though they have been very oppressive in making almost every technical error or variation from statute or form fatal in naturalization proceedings, in which the lay applicants are not supposed to have legal advice, and in which they are made to suffer for errors of governmental officials.

Ninth. Certificates of arrival are required to be filed with first papers already.

A few good changes are made, particularly in allowing the issuance of "certificates of arrival," in cases where the governmental records have been lost or destroyed or the officials failed to enter a bona fide admission, which acts have barred thousands of unfortunates from becoming naturalized through no fault of their own for a number of years past, despite repeated recommendations for relief by the Commissioner of Naturalization and the Secretary of Labor. Many other provisions are clarified.

COLUMBIA RIVER BRIDGE, ARLINGTON, OREG.

Mr. SHEPPARD. On behalf of the senior Senator from Vermont [Mr. DALE], I report back favorably, from the Committee on Commerce, House bill 13824, authorizing L. L. Montague, his heirs, legal representatives, and assigns, to construct, maintain, and operate a bridge across the Columbia River at or near Arlington, Oreg.; and I submit a report (No. 1328) thereon. I ask unanimous consent for the immediate consideration of the bill.

The PRESIDING OFFICER (Mr. FESS in the chair). Is there objection to the immediate consideration of the bill?

There being no objection, the Senate, as in Committee of the Whole, proceeded to consider the bill.

The bill was reported to the Senate without amendment, ordered to a third reading, read the third time, and passed.

BILLS INTRODUCED

Bills were introduced, read the first time, and, by unanimous consent, the second time, and referred as follows:

By Mr. NEELY:

A bill (S. 4714) for the relief of Newton C. Stalnaker; to the Committee on Military Affairs.

A bill (S. 4715) granting an increase of pension to Amelia Bee;

A bill (S. 4716) granting a pension to Paulina Williams; and

A bill (S. 4717) granting an increase of pension to William C. Milliner; to the Committee on Pensions.

By Mr. EDGE:

A bill (S. 4718) for the relief of James W. Walters; to the Committee on Claims.

By Mr. WARREN:

A bill (S. 4719) granting a pension to Marie Myers (with accompanying papers); to the Committee on Pensions.

By Mr. DILL:

A bill (S. 4720) to authorize the appropriation of funds for aiding in survey and location of tunnel under Cascade Mountains in the State of Washington; to the Committee on Military Affairs.

By Mr. SWANSON:

A bill (S. 4721) to extend the time for commencing and completing the construction of a bridge across the Potomac River and to authorize the use of certain Government land; to the Committee on Commerce.

By Mr. COPELAND:

A bill (S. 4722) granting a pension to George Francis Kilburn; and

A bill (S. 4723) granting a pension to Elsie Bell; to the Committee on Pensions.

A bill (S. 4724) for the relief of Norman S. Cooper; and

A bill (S. 4725) to provide for advancement in rank of certain officers on the retired list of the Navy; to the Committee on Naval Affairs.

By Mr. CARAWAY:

A bill (S. 4726) granting an increase of pension to George A. Atkinson; to the Committee on Pensions.

A bill (S. 4727) providing for reimbursement of the St. Louis Southwestern Railway Co. for expenditure in revetment work on the Arkansas River during the flood of 1927; to the Committee on Claims.

SARAH E. KAEDING

Mr. SCHALL submitted the following resolution (S. Res. 277), which was referred to the Committee to Audit and Control the Contingent Expenses of the Senate:

Resolved, That the Secretary of the Senate hereby is authorized and directed to pay from the contingent fund of the Senate to Sarah E. Kaeding, wife of Edward H. Kaeding, late an assistant clerk to Senator SCHALL, a sum equal to six months' compensation at the rate he was receiving by law at the time of his death, said sum to be considered inclusive of funeral expenses and all other allowances.

CATHOLIC ELEMENT IN THE SOUTH—ADDRESS BY SENATOR BRUCE

Mr. TYDINGS. Mr. President, I ask unanimous consent to have printed in the RECORD a speech delivered by my colleague, the distinguished senior Senator from Maryland [Mr. BRUCE], at Pen Mar Park, Md., on August 9, 1928, on the Catholic Element in the South. It is a nonpolitical speech.

There being no objection, the speech was ordered to be printed in the RECORD, as follows:

Mr. Chairman, ladies, and gentlemen, I deem it a great honor to be invited to address the members of your flourishing and patriotic order upon this occasion. Its membership includes many of my personal friends, and I am entirely familiar with the generous measure of useful public service that it has rendered in both peace and war. I was born and bred in a Southern State, Virginia, and all my adult life has been passed in another Southern State, Maryland, and I am here to-day to declare that any southerner, clerical or lay, who seeks at the present time to arouse anti-Catholic prejudices in the breasts of the southern people for the purpose of compassing the defeat of Gov. Alfred E. Smith as a candidate for the Presidency because he is a Catholic is false to the history and to all that is best in the popular sentiments and traditions of the South. The great Virginia statesman, Thomas Jefferson, was the author of the Virginia statute of religious freedom, one of the precursors of the religious guaranties of the Federal Constitution, and prized that fact so highly that he drafted an inscription for his gravestone which mentions him only as the author of the Declaration of Independence and of that statute and the father of the University of Virginia. Faithful to his liberal and enlightened views, when the university of his creation celebrated a few years ago with great pomp and ceremony the centenary of its birth its trustees selected out of the entire clergy of the South as the person to open the exercises of that memorable celebration with prayer Bishop O'Connell, the Catholic bishop of Richmond, Va. To the great Virginia statesman, James Madison, is mainly attributable the enactment of the statute for religious freedom written by Jefferson, and the defeat of the effort to impose upon the people of the State of Virginia a general assessment for the support of the churches of that State.

To the influence of the same statesman we are chiefly indebted for the adoption of the Federal Constitution which now provides, first, that no religious test shall ever be required as a qualification for any office or public trust, under the United States, and, secondly, that Congress shall make no law respecting the establishment of a religion, or prohibiting the free exercise thereof. Truly, indeed, did Washington, once, in reply to an address presented to him by a group of Jews, describe that Constitution as one which gives to bigotry no sanction and to persecution no assistance. Nor should it be forgotten that in 1649, 138 years before the adoption of the Federal Constitution, the southern and Catholic colony of Maryland enacted the act of toleration which has ever since exercised such a profound influence over the character of the people of Maryland. This act, it is true, did not extend religious tolerance beyond the pale of trinitarian Christianity, but it was in advance of anything of the kind that the world had then known. And it is but just to say that until the recent rise of the Klan in some of the southern and other communities of the United States no part of our common country had, on the whole, adhered so scrupulously to the principle of religious liberty as the South. With the exception of a brief term of misrule in Maryland, marked by the most flagrant excesses, the Know-Nothing Party never acquired any real foothold in the South. Indeed it was in the State of Virginia that popular indignation, under the brilliant leadership of Henry A. Wise, gave it the blow which brought its vile existence to an end. Many striking utterances have fallen from the lips of our public men, but I know few more vivid than the proud words in which Wise voiced his exultation after that event:

"I have met the Black Knight with his visor down, and his lance and his shield are broken."

Nor did that other proscriptive organization, of more recent origin, the A. P. A.—the American Protective Association—which throve, for a time, in some of our western communities, ever obtain any ascendancy over the southern mind. Until the advent of the present Klan, Catholic and Protestant had lived together in mutual understanding and cordial fellowship in the South. In Maryland, the sectarian dissensions of its earlier history had been forgotten by everyone but the historian, and even the later Know-Nothing outrages were remembered only for their instructive warnings. In the other Southern States there had been, for the most part, no anti-Catholic manifestations to be forgotten or remembered. The good order of the 11 States, at least, which constituted the Southern Confederacy, unlike that of more northern portions of the United States, had never, so far as I can recall, been disgraced by mob outbreaks against Catholics, or by the firing of a Catholic church or convent, or by attempts to suppress or cripple Catholic parochial schools. A certain amount of prejudice against the Catholic Church, of course, had always existed in those

States, differing only in degree from the lurking prejudices which had existed between the different Protestant sects in them; but, when it is recollected that their inhabitants, outside of Louisiana, were almost entirely of English or Scotch origin, and that it was not so long ago that even such a churchman as Gladstone declared that, if there were two things on earth that John Bull hated, they were an abstract proposition and the Pope, the anti-Catholic prejudice, which prevailed in those States was, in the last analysis, a very feeble thing, and mainly a part of the inheritance which their first settlers had brought with them from beyond the seas; and such, in spite of the extent to which it has recently been inflamed by clerical extravagance and lawless knavery, it is to-day. I know that old Southern society too well not to realize that, apart from exceptional conditions, bred by the special status of the negro, it was essentially tolerant.

In all the personal and social relations of life there was no line of separation whatever drawn between Catholic and Protestant. Indeed, nowhere was such a line drawn even as between Jew and Protestant. There were no families of better social position in the South than the Cohens, of Baltimore; the Myerses, of Richmond; the Mordecais, of South Carolina; the Minises, of Georgia; or the Yulees, of Florida, all families of Jewish extraction. Among the most distinguished men of their time were David Levy Yulee, of Florida, and Judah P. Benjamin, of Louisiana, both of Jewish origin. The former was twice a United States Senator before the Civil War and a member of the Confederate Congress, and was, besides, a man of the very highest social standing; and the latter, a great advocate, counselor, law writer, and United States Senator, filled with eminent ability two places in the cabinet of Jefferson Davis. Nor was his social standing less assured than that of Yulee.

When it is borne in mind that, with the exception of Louisiana, the Catholic population of the South has been relatively small, another proof of the comparative freedom of the South in the past from sectarian intolerance is found in the number of Catholics who have occupied conspicuous stations in the history of the South. There are few more revered and interesting figures in that history than the figure of the venerable Catholic statesman, Charles Carroll of Carrollton, who staked a larger fortune, perhaps, upon the issue of the American Revolution than any other signer of the Declaration of Independence, and after serving his country in more than one high office left behind him a reputation that is a part of the nobler heritage of the American people. Among the members of Jefferson Davis's cabinet was Stephen R. Mallory, of Florida, a Catholic, who had previously been a Member of the United States Senate from Florida, a distinction which was afterwards enjoyed for 11 years by his son, Stephen R. Mallory, the younger.

Both of the present United States Senators from Louisiana, my friends JOSEPH EUGENE RANSDELL and EDWIN SIDNEY BROUSSARD, are Catholics, though the Catholics of Louisiana are but a minority. Before he became Senator the former represented for 14 years, in the House of Representatives, a congressional district in Louisiana in which only a small part of the population was Catholic. On the other hand, a present Member of the House from Louisiana, WHITMELL P. MARTIN, a Protestant, has represented for as long a period a congressional district in Louisiana in which there is a pronounced Catholic majority. Some time ago Senator BROUSSARD observed to me that his heart warmed to our Maryland people because they were so much like the people of Louisiana. Of course, that is because a large Catholic element in each case breeds a spirit of liberality and cordial friendliness between all elements of the body politic. The remedy for anti-Catholic intolerance is more Catholics. Some time ago Senator HARRIS, of Georgia, told me, in the course of a conversation, that he doubted whether it would be wise for the Democratic party to nominate a Catholic to the Presidency. "I know," he said, "that there is an anti-Catholic sentiment in Georgia." "The trouble with Georgia," I answered, "is that it has not enough Catholics. If it had as many as Maryland, its people would realize as fully as the people of Maryland do that Catholics are very much like the rest of us and that, aside from differences in point of religious faith, there is no difference between a Catholic and a Protestant worthy of a minute's sane reflection." Two Governors of Virginia, John Floyd, and his son, John B. Floyd, have been Catholics. The latter was also Secretary of War in the Cabinet of President James Buchanan. Two Senators from Virginia have also been Catholics, John W. Johnston and John S. Barbour. A Catholic, too, was Patrick Walsh, at one time a Senator from Georgia. So, likewise was Thomas Burke, one of the Governors of North Carolina.

One of the most celebrated and universally esteemed and beloved of all North Carolinians was William Gaston, a Catholic, who served a term in Congress, and was among the ablest lawyers and judges that North Carolina ever produced. Two other Catholics, M. E. Manly and R. M. Douglas, have been justices of the Supreme Court of North Carolina. A Catholic who won unusual distinction as a Member of Congress was M. P. O'Connor, of South Carolina. Two southern Catholics, Roger B. Taney, of Maryland, and Edward Douglass White, of Louisiana, have been Chief Justices of the Supreme Court of the United States; the first, after he had been Attorney General of the United States and Secretary of the Treasury, and the second after he had been a United States Senator; and so grateful was the entire southern bar to President Taft for appointing the latter to the Chief Justiceship that it was afterwards little less than unanimous in its desire that President Wilson should appoint Taft to the bench of the Supreme Court. Two of the most celebrated Chief Justices of the Court of Appeals of Maryland, Richard H. Alvey and James McSherry, were Catholics. I might mention other southern Catholics, less famous than those already named by me, who have held high public stations of one kind or another; such as our own Catholic governor, the late John Lee Carroll; but my enumeration has been ample enough, I am sure, to illustrate the point that I have been making. Jefferson Davis, of Kentucky and Mississippi, a Protestant and a typical southerner, if there ever was one, was a pupil for two years at a Catholic school, and I may be pardoned for mentioning the fact that two of the daughters of my uncle, James A. Seddon, of Virginia, a Protestant and Secretary of War in Jefferson Davis's cabinet, were educated in a Catholic convent. Two of the most ripely educated men that I have ever known were those two great Baltimore lawyers, Severn Teackle Wallis and William A. Fisher. Both were Protestants, and both were for a time students at St. Mary's College, in Baltimore, a Catholic institution.

The significance of the facts that I have stated will be apparent enough when it is recalled that, largely through the influence of John Jay, one of our most illustrious statesmen and Chief Justices, a provision was inserted in the constitution of New York denying the privilege of citizenship to a Catholic unless he abjured his allegiance to the Pope "in matters ecclesiastical"; that the constitution of New Jersey once contained a provision equally offensive to the Catholic conscience; that it was not until 1833 that the Legislature of Massachusetts repealed a tax imposed upon Protestants and Catholics alike for the support of an established Protestant church; and that it was not until 1877 that New Hampshire repealed a provision of her State constitution excluding Catholics from public office. Even now, if it were possible to separate the recent development of sectarian bigotry at the South from its complications with prohibition and Tammany Hall, it might well be questioned whether anti-Catholic hostility is not decidely more rife in New Jersey and on Long Island than it is in any Southern State. This separation I should hardly be impartial enough to undertake, for I have long believed that the clerical fanaticism back of prohibition and its unwarranted invasions of personal liberty largely fomented the sectarian fanaticism which is such an odius menace to religious liberty at the present hour. Civil and religious liberty are, to use Shakespeare's phrase, "two lovely berries molded on one stem," and when one falls the other is likely to fall, too. In other words, to change my image, prohibition and religious bigotry, as I see it, are but the fruits of the same sour soil. At any rate, it is indisputable that the present klan has never worked such moral and intellectual degradation, even in Alabama, as it did in Indiana when, under its debasing and corrupting influence over the political and official life of that Commonwealth, the penitentiary, as I have asserted on a previous occasion, might almost be said to have become a kind of annex to the statehouse.

Nor need we go beyond the South for disproof of the absurd idea that American Catholics do not respond to precisely the same patriotic impulses and civic ideals as other Americans. The most terrible ordeal that the South was ever called upon to undergo was that of the Civil War, and to that ordeal the southern Catholic brought the same degree of self-devotion, to say the least, as his Protestant brother. Admiral Raphael Semmes, of Maryland, the famous commander of the *Alabama*, was a Catholic. So was Gen. Pierre G. T. Beauregard, of Louisiana, the hero of Bull Run; so were the Confederate Generals, William J. Hardee, of Georgia, and Patrick Rohayne Cleburne, of Arkansas. The last-named perished in battle. A Catholic also was my kinsman, Gen. William Lewis Cabell, of Virginia, and such, too, was Col. John W. Mallet, of Alabama and Virginia, the accomplished head of the munitions service of the Confederacy, and one of the most renowned teachers of chemistry in our educational history. Gen. James Longstreet, one of the most famous of all the Confederate generals, died a convert to the Catholic faith. How completely the young southern Catholic gave his whole being to the southern cause no one need be at a loss to know who has ever had an opportunity to note how, even to this day, the knightly and generous soul of our venerable friend, George C. Jenkins, of Baltimore, kindles, as a fire is kindled by a fresh current of oxygen, when something brings back to his memory the scenes of the Civil War in which he was such a chivalrous and gallant figure.

Both of those distinguished officers of the World War, Gen. Robert Lee Bullard, of Alabama, and Admiral William S. Benson, of Georgia, are Catholics.

Why the truth is that almost every battle hymn or stirring lyric, that has ever powerfully aroused the patriotic emotions of the southern people, has been written by a Catholic. William Gaston was the author of those lines which the North Carolinian cherishes so fervidly:

> "Carolina! Carolina! Heaven's blessings attend her,
> Whilst we live, we will love and cherish and defend her.
> Though scorners may mock at and witlings defame her,
> Our hearts burn with gladness whenever we name her."

A Catholic, James Ryder Randall, of Maryland, was the author of our Maryland battle hymn, "Maryland, My Maryland." "Hurrah! Hurrah! for the Bonnie Blue Flag That Bears a Single Star," that Confederate battle song which I used to hear so often in my youth, was written by Capt. Harry McCarthy, an Arkansas Catholic. "The Conquered Banner" and "The Sword of Lee," two of the best lyrics inspired by the Civil War, were written by Father Abram Joseph Ryan, of Virginia and Alabama, who was a chaplain in the Confederate Army, and whose brother, Capt. David J. Ryan, died in its service. How even the most virulent Southern bigot could read the following lines from "The Conquered Banner" without feeling his heart grow liquid is more than I can understand:

"Furl that banner for 'tis weary;
Round its staff 'tis drooping dreary;
Furl it, fold it, it is best;
For there's not a man to wave it,
And there's not a sword to save it,
And there's not one left to lave it
In the blood which heroes gave it;
And its foes now scorn and brave it;
Furl it, hide it—let it rest!
For though conquered, they adore it!
Love the cold, dead hands that bore it!
Weep for those who fell before it!
Pardon those who trailed and tore it!
But, oh! wildly they deplore it,
Now who furl and fold it so.
Furl that banner softly, slowly!
Treat it gently—it is holy—
For it droops above the dead.
Touch it not—unfold it never,
Let it droop there furled forever,
For it droops above the dead."

Even "Dixie," the air that above all others quickens the pulse of a southerner, was written by a Catholic, Daniel Emmett; though not by a southern Catholic.

Especially can the late history of Maryland be invoked to stigmatize, as it deserves, the calumny that the Catholic is not as good an American citizen as any American citizen. For more than 40 years I have been associated with the public life of this State, either as an earnest and active citizen merely, or as a member of the State or Federal Legislature, or as the incumbent of one administrative office or another. During that period not one solitary instance has ever been brought to my attention in which the Catholic Church, in Maryland, has ever endeavored, in any manner whatsoever, improperly to influence the conduct of any public official or employee. On the contrary, its attitude toward the State has, in every respect, been governed by the highest degree of probity, dignity, and wisdom.

During the same period, Catholics, Protestants, and Jews, in Maryland, have been appointed or elected, indistinguishably to public office. Personally, I should as soon have thought of voting against a candidate because he was a Catholic, as because he had red hair. And, during the same period, in all the business, social, and personal relations of life, the different elements, of which our Maryland population is composed, have lived together in fraternity and peace. For many years of this period, perhaps the most universally and beloved Marylander was that great prelate and sterling citizen, His Eminence, the late Cardinal Gibbons. Until his death, no really significant public exercises in Baltimore were deemed complete unless hallowed by an opening prayer from his eloquent lips.

Indignantly, scornfully, therefore, do I, a southerner by both birth and adoption, reject the suggestion from any southern source, clerical or lay, that a Catholic can not safely be trusted to be President of the United States. Surely such a claim should not be heeded until some one has pointed out at least one case in which the vast numbers of American Catholics who have held important civil or military posts, in the United States, have allowed themselves to be deflected from the line of their public duty by sectarian considerations, or at least one crisis, in peace or war, when the American Catholic was faithless to his patriotic obligations. Until then such a claim should be set down as a violation of both the letter and spirit of our Federal Constitution, as a gross insult to some 19,000,000 of American Catholics, and as a rank affront to the good sense and good feeling of their non-Catholic brethren.

The present Democratic candidate for the Presidency, Gov. Alfred E. Smith, is a man endowed with a singularly charming and magnetic personality. His personal integrity and his official fidelity are unassailable. In his domestic life, he is true to the kindred points of heaven and home. No man in the public life of our country has ever defined more clearly or correctly the respective functions of the church and the state, or has lived up to his definitions more scrupulously in practice. His four terms, as Governor of the great State of New York, have been distinguished by a degree of executive efficiency which may fairly be termed administrative genius. His speeches and writings evidence a powerful mind, capable of penetrating to the core of any political problem. The most striking tributes that have ever been paid to his abilities have been paid by such illustrious Republicans as Elihu Root, Charles E. Hughes, Dr. Nicholas Murray Butler, and Attorney General George W. Wickersham. There may be good political reasons why even such a candidate as this should not be preferred by the American voters, to his opponent, Mr. Hoover, but the fact that he is a Catholic can not be one of them. It was no less a person than James Madison, "The Father of the Federal Constitution," who declared, at an early stage in our national history, that there is nothing in the Catholic religion inconsistent with the purest republicanism.

MEMORIAL CROSS AT BLADENSBURG, MD.—ADDRESS BY SENATOR BRUCE

Mr. STEPHENS. Mr. President, on May 30 of the present year the senior Senator from Maryland [Mr. BRUCE] delivered a very interesting address at Bladensburg, Md., on the occasion of the dedication of a memorial cross to soldiers who died in the World War. I ask that the address may be printed in the RECORD.

There being no objection, the address was ordered to be printed in the RECORD as follows:

Ladies and gentlemen, over the graves of the Lacedæmonian heroes who perished at Thermopylæ were inscribed these words: "Oh, stranger! go and tell the Lacedæmonians that here we lie obedient to their laws." The same noble message comes to us to-day from the graves of the 49 residents of this county who gave up their lives to the cause of their country in the great World War, and whose names have been recorded upon the cross behind me. From his last resting place each of them says to the passing stranger in accents that awaken all the tenderest and loftiest impulses of the human soul: "Oh, stranger! go and tell the American people that here I lie obedient to their Constitution and laws."

It is meet, therefore, in the highest degree that we should gather at this commemorative spot to-day, and, for a brief space, lay aside all our ordinary pursuits, duties, and cares for the purpose of paying our heartfelt homage to the courage, valor, endurance, and devotion of those 49 individuals.

Naturally enough, after such a gigantic, widespread, and destructive war as the World War, it is quite the habit to decry war under all circumstances as a tragic and abominable thing. That mere wars of aggression deserve this reproach, I do not deny. They bring to light, in more impressive and forbidding forms than anything else is capable of doing, the elemental passions to which human nature is subject; and the fearful loss of blood and treasure which those passions work when fired by the deep-seated animosities of contending nations. Against such wars the face of the whole civilized world should be set like adamant, especially now that international warfare has been supplied by human wealth and invention with more deadly instrumentalities for taking human life and blasting the fruits of human industry than ever before. Modern wars are not only marked by the same ghastly effusion of human blood that wars have ever been, but they leave behind them even more crushing pecuniary burdens than warfare formerly did.

All the same, I take this occasion to declare that there is such a thing even in the strictest moral sense as a righteous war, a noble war, a glorious war; indeed, it was almost on my lips to say a holy war. Such are wars waged in repelling the wanton lust of conquest or ruthless military ambition, in the assertion of human liberty in its highest forms, or in defense of the altars and homes of an unoffending people. It is to be hoped that the day will come when aggressive warfare will be effectually held in check by the concerted efforts of the civilized powers of the world, but, until that day comes, the first duty of every people will be to provide all the military and naval defenses that its safety calls for, and to maintain, unimpaired, the manly spirit which it can not afford to lose unless willing to be the passive, helpless victim of some foreign foe who has not lost it. It is said that when Crœsus showed his shining heaps of gold to one of his contemporaries, the latter remarked dryly: "You will keep all this gold only until some one comes along with more iron than you." The halcyon has not yet brooded so long over the troubled waters of human existence that any nation which prizes its liberties can not well take the suggestions of that pithy observation to heart. It is occasionally denied that our participation in the World War was inspired by the motives that justify a declaration of war. The soundness of this view I scornfully challenge. In my opinion, the motives that prompted our declaration of independence were not more legitimate and honorable than the motives which prompted our declaration of war against Germany. We had patiently endured, at her hands, every indignity that one people can endure at the hands of another, without a complete loss of self-respect; indeed, no small portion of our people felt that these indignities had been so grave and repeated that we should not stop to ask whether we were too proud to fight, to use Wilson's phrase, but whether we were proud enough to fight. Moreover, aside from the specific injuries which had been inflicted upon us by the merciless submarine warfare waged by Germany, it had become clear to the overwhelming

majority of the American people that the military caste which had obtained unquestioned control of the will of the German people was a menace to democracy and human liberty in the New World as well as the old.

Assuming that I do not err in my view of the rightfulness of our entry into the World War, it follows that the individuals to whose memory we are bringing our tributes of reverence and love to-day did not lay down their lives in a war of conquest, or of aggression in any form, or in a war that was, in any respect, the mere offspring of human selfishness, but in a war sanctioned by considerations of national safety that can not be successfully assailed. In other words, they laid down their lives in a righteous, patriotic cause fully worthy of the unselfish and unrepining spirit in which they met their fate and won the gratitude of their people forevermore.

And what gratitude transcends that which a State owes to the soldier who parts with his life in the service of his country in time of war? For arms to be effective abroad there must be wise counsels of statesmanship at home, it is true. But, after all, when war is flagrant, it is upon the soldier mainly that everything depends. It is to him that his country must look if it is not to be devastated, if its civilian population is not to be visited with outrage, if its temples are not to be profaned, if its homes are not to be violated. Of him is expected a measure of unhesitating self-immolation that is expected of no other member of the body politic. Of every citizen, to be sure, a certain degree of civic fidelity is asked. The policeman or the constable may, at times, be required even to surrender his life in the performance of his duty. But, in time of war, the soldier lives in daily, even hourly, companionship with peril to limb or life. Every tie that connects him with his mortal being he must renounce without a thought of self.

It was the lofty nature of the soldier's obligation from this point of view which led Dr. Samuel Johnson to affirm on one occasion that every man thinks meanly of himself for not having been a soldier.

It is when the thoughts that I have feebly sought to express are fully borne in upon our minds that we begin to realize how deeply we are indebted to that band of bright, brave youths who left their homes in this county for service in the World War and never returned. They now occupy a higher place in the lasting esteem of the people of this county than any group of living youths can ever hope to occupy. Courage, valor, endurance, and devotion, those exalted things which stand out in lettered prominence upon the cross near us, have glorified them. Death has hallowed them. Grateful patriotism has washed away all the stains of mortality from their faces and garments, and so long as this county from whence they came remains the abode of men and women worthy of them their fair forms will be invested with immortal freshness.

What lessons should we take away from this occasion? First of all, the lesson that, in time of war, we all owe the full measure of loyal allegiance to our country. When the mother calls, the children must come and each lay his gift upon her sacred altar, whether it be the gift of robust, fearless youth or of professional or manual skill, or of wealth, or of life itself, for it is still as true as it was in the age of the Roman poet that it is a sweet and honorable thing to die for one's country.

The next lesson that we should take away from this occasion is that of mutual sympathy and dependence. When the World War came, with its enthusiasm and sacrifices, the ignoble voices of sectarian bigotry and racial animosity died down into silence. Catholic and Protestant, Jew and negro, each took his place in our martial array and each performed his duty. Why should they not all live together in unity and concord and mutual understanding now?

The last lesson that we should take away from this occasion is the duty of each of us to do all that he or she can to bring about the closest concert between our country and the other great civilized forces of the earth for the purpose of reducing international warfare to the narrowest possible limits. I am no pacifist. I do not believe with the Quaker poet, Whittier, that "Peace unweaponed conquers every wrong," or that world peace can be secured by paper resolutions merely, or by simplying crying "Peace! Peace!" As I see it, those that do are moving about in a world of unreality. The truth is that there is no peace that is not commanded, not even in our own households. But I do believe that, just as the domestic peace of cities, States, and nations is successfully policed, so there is no reason why, with the zealous aid of our country, the peace of the world could not by the combined efforts of all civilized lands be successfully policed, too. I for one am willing to make the experiment.

In conclusion, I am reminded that the men whose memory we are honoring to-day were all, or mostly all, young. They wore the rose of youth upon them, to use Shakespeare's lovely phrase, and they furnish but another illustration of the old pathetic saying that in peace sons bury their fathers, but that in war fathers bury their sons. In other words, they died before their day. How full, nevertheless, their lives are now you will, I am sure, realize when, in closing, I read aloud to you these beautiful lines written by my friend Armistead C. Gordon, of Staunton, Va., a true poet:

BEFORE THEIR DAY

Here in the bronze their changeless names are wrought,
Who, in youth's morning hour, beheld the shore
Of time fade from their sight, and, from their thought,
Pass all the dreams and raptures that life bore.
We read the legend with a questioning wonder
At the inscrutable mystery, and say,
Grieving that death their forms from ours should sunder:
"They died before their day."

Not so. He did not give us pain for friend,
Nor gave us death for hope of life, in vain.
Though they be dead, yet death is not the end.
Who die for home and country live again,
Here and hereafter. At the call of duty,
They fell on sleep, forsaking this poor clay,
And now they flourish in immortal beauty
Who died before their day.

They are forever young. Nor care nor age
Can ever mar their loveliness and youth.
Their story blazoned on the whitest page
Of life's unfinished volume reads: "For truth
And love and faith and honor, nobly cherished,
They gave their all. Who shall their fate gainsay?
They drank life to the lees, thus to have perished
And died before their day."

They do not need our sorrow. Grief and tears
Are rather for the living than the dead.
They are inheritors of eternal years;
We are the children of decay and dread,
Soldiers of God, beautiful like archangels,
Fighters for God and country—let us pray
The lives, the deaths of these be our evangels,
Who died before their day.

PROHIBITION ENFORCEMENT

Mr. BLEASE. Mr. President, during the campaign I made some remarks in my State in reference to the enforcement of the prohibition law. In order that some people in that section may realize that I did not make any mistake, I ask to have published in the RECORD as part of my remarks an article, entitled "Washington's Little Back Rooms," which was published in the Washington Post on Sunday, November 18. There are some pictures accompanying the article which, of course, can not be put in the RECORD, but I wish they could be, as they are very interesting.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

[From the Washington Post, Sunday, November 18, 1928]

WASHINGTON'S "LITTLE BACK ROOMS"—"WHERE CAN I GET A DRINK?" NOW AN EASY ONE FOR THE ROUNDER—STARTLING REVELATIONS OF THE GROWTH OF THE SPEAK-EASY IN THE CAPITAL—"WHISPER LOWS" NOW HONEYCOMB CITY—PRICES VARY WITH LOCATION—SURPRISING RESULTS OF ANALYSES OF THE "HOOTCH" THEY SELL—CONTROL A KNOTTY PROBLEM, BUT ACCESS EASY FOR THE CASH CUSTOMER—IN THE SHADOWS OF GOVERNMENT BUILDINGS

Two men met on the corner of Fifteenth Street and Pennsylvania Avenue.

"Do me a favor, Tom. I've been out on a bit of 'a bender,' and I'm nervous. What I need, most of all, to straighten me out, is a drink. If I cash a check, I know I'll start in again. So just take me and buy me one highball."

The man called Tom looked at his watch. "I'm on the way to meet my wife," he replied. "I've just got five minutes to get there—and I've got only enough money to take her to dinner. So, you see, there's not enough time and not enough money. Besides, I don't know where you could purchase one drink. A bottle of bootleg; yes. One drink; no!"

He was in the act of turning away. His friend and bended companion touched him pleadingly on the sleeve.

"You don't know where——?" In amazement. "Say, Tom, where have you been all my life?"

"Well," said Tom, "you know as well as I do that you can't get a drink of liquor within the time allotted, five minutes, nor without denting my limited roll so that I can't purchase dinner for myself and wife, and——"

"If I can get one within two minutes' walk from this spot, and for a measly half-dollar, will you go with me? The wife will certainly wait a few minutes overtime for you."

The suggestion interested the man called Tom. He looked at his watch again, figured he might keep the better half of the family waiting at least five minutes, and agreed to the proposal. "Provided," he added, "you don't go beyond two minutes' walking distance."

"Agreed," said the other, as he grabbed his pal by the arm, and hustled him up Fourteenth Street.

In the allotted time, the men had climbed an age-old stairway, had been admitted to a speak-easy, were seated before two highballs.

"I've been on the water wagon now since the country went dry," confided Tom, "but I am going to take this drink with you just to satisfy a curiosity—and not a thirst."

"What kind of liquor is this?" he asked the attendant.

"Canadian Club, sir," informed that individual.

"But you poured it out of a pitcher.

"Oh, yes, sir; the bottle is in the little back room. We don't dare bring it out here."

"You don't dare?" asked the man named Tom, who recalled the easy entrance. His companion, leading the way up the stairs, had simply knocked at a door. A little slot had flown open, two quizzical eyes had looked through the peephole, and a question had been asked: "You been here before?"

"Yes," was the reply. The door opened, and the men entered a room barren of all furniture, passed into another room where tables and chairs were arrayed, and where men were sitting around drinking beverages. It was dusk outside, curtains in the room drawn. Gas jets furnished light.

In four or five minutes' time the two emerged. "Not bad likker, either," said Tom, in amazement.

As they were parting he expressed astonishment.

"I didn't know there were such places in Washington, old man—places where you could go and get a drink—one drink, or two, without purchasing a bottle."

"You've been on the water wagon since prohibition, haven't you?" parried the other.

"Are there any more places like this?" asked Tom.

The other man smiled—a faint smile, the flush of reminiscence spreading over his countenance. "Are there any more like it in Washington?" he asked, and answered his own question: "Say, I can get you drunk, taking only one drink in each place from here to the Capitol."

"You don't say so?" said Tom.

"I not only say so, I know so," responded the other.

What is more, the man spoke the truth.

Speak-easies in Washington are thriving institutions. There are enough of them to supply the demand of all the heavy drinking men in town. This is no hearsay evidence. This is information straight from the paddock—straight from the feed box, as they say at the race track.

Washington, up to a year or so ago, was considered the most law-abiding community in the country. There was drinking going on here, of course, as there is drinking everywhere; but it was done in the sanctity of the home, in the kitchen, or wherever it is, in the house, that men gather to violate the eighteenth amendment and the Volstead Act.

In New York, Chicago, Philadelphia, and other cities of more than 1,000,000 population, the speak-easy was accepted as a necessary conjunction of a heebee-jeebee life. Large centers of population have always harbored violations. Washington, aside from being the Capital of the Nation is also a comfortable town, a place where the majesty of the law may be paraded. Or so, at least, it seemed—until this wave of the speak-easy came in on a tide of lawlessness.

Now, anyone who knows the ropes may go almost anywhere in the down-town section and get liquor, served in little back rooms. The first place alluded to in this story is within the very heart of the city. Standing on the roof of the Press Building a man, were he in the mind to do so, might easily throw the proverbial stone and place it through a window of the speak-easy visited by this correspondent.

Up on Connecticut Avenue stands the Mayflower Hotel, come to be the rendezvous of the great and the near great in this Nation, and the stopping place for celebrities from every corner of the globe. If an eagle-eyed sightseer were to stand on the roof of the Hotel Mayflower, look over one row of buildings, and peer down into a second-story front, he would see one of the busiest speak-easies in the city; provided, of course, the shades were lifted; which, naturally, they are not.

From the same vantage point a man might look into the back part of a little lunchroom and find there 20 or 30 men seated around tables, all enjoying their grog.

The speak-easy, at last, has come to Washington. It was a long time getting here, but here it is—and no mistake. Just how many speak-easies there are in town no one knows; but the number is sufficient, judging from the ease in which they are found by outsiders and by those who know their Washington.

In some of the places visited by this curious correspondent the brand of liquor served was as good as might be secured in dear old Lunnon town. In others it smacked of having been shipped, if it wasn't made on the premises, in old kerosene barrels. Just for the fun of it a chemist was asked to make an analysis of some of this stuff.

Various samples were handed to the laboratory recognized as the most reliable in the city. There were Scotch from the North Country, gin from Virginia, "Canadian Club," and several other concoctions. One sample, done up in ginger ale, spoke for itself. It had the strong smell of varnish and the potency of a kick from an Army mule. It defied successful identification.

The so-called "Canadian Club" analyzed as 90 proof, chemically O. K. liquor with an acid reaction, but no injurious ingredients such as have caused havoc in other cities where many deaths have occurred from poison alcohol. The chemist's report, however, specified that it could not be identified as any recognizable distillation which might properly boast any such established name as "Canadian Club."

The gin assayed 86 proof, was faintly acid, and embodied no dangerous chemical element.

What purported to be "Scotch" rated 88 proof, was faintly acid, contained a trace of fusel oil—but was otherwise chemically safe—and was identified by the laboratory expert as "green rye," to which a counterfeit, though harmless, "Scotch" flavor had been added.

While none of the samples submitted for this minute qualitative analysis proved to be what its label indicated, neither did any reveal any property which might be looked upon as dangerous to eyesight or life, although the nerves and the digestion might understandably come out a little worse for wear, not to mention the liver and the kidneys.

The point is that Washington speak-easies seem to be a step ahead of those in other eastern cities in that the potions they sell rate about the same quality as the best it is possible to procure in the open bootleg market at the highest scale of prices exorbitantly assessed.

It is probable that the liquid nail files purveyed in the restaurant back room near Connecticut Avenue constitute the exception. This will only be served ready mixed and effectively disguised in ginger ale, but even so possesses every essential property of a potent anesthetic, judging from the semiconscious condition of those draped over the little back-room tables the evening our party joined the clinic.

The prices in the speak-easies of Washington range from the lowly of the low neighborhood to the high of the bon ton neighborhoods. That is, if you buy your drinks down on the water front you pay water-front prices. The same custom prevails in Baltimore. Sailors who come in from the high seas find reasonable taxes on their Light Street grog. Those men of the maritime professions who lurk down in southwest Washington may get a good drink—or what they call a good drink—of whisky for 10 cents a dram. As the procession moves farther north and comes into the neighborhood of the British Embassy and the Mayflower Hotel the prices in the speak-easies advance, until once the vagrant in search of grog reaches the upper stretches of Connecticut Avenue he is liable to pay as high as $1 for a highball.

So it goes. Washington has taken the speak-easy to its bosom. Some time back there were probably only five or six speak-easies in town—and they were not even called that. For some reason or other the boys who run speak-easies were rather slow in getting started here; but now, any old rounder in Washington knows where he can get a drink.

One night, not so long ago, awaiting an appointment with an old friend in a well-known hotel lobby, the fellow with me suggested that the interim be livened with a cocktail. Out of curiosity, the question was asked: "Where are you going to get one? In this hotel?" thinking, perhaps, some out-of-town friend had brought along the necessary ingredients. There is a constant flow of visitors from New York.

"No," was the answer; "across the street."

Over across the street all looked as innocent as the front yard of a church. It was nighttime, about 11 o'clock, and hardly any one was in sight. Buildings were closed. The only lights came from a lunchroom window.

Together, we strolled across the street. My friend pushed his way through the lunchroom doors. Behind the counter were two women. Tables, near the wall, were devoid of patrons. A long rail for trays, in the cafeteria manner, was idle. The two women were busy at their tasks behind the counter.

"What is it?" one of them asked.

"Is Dan in?" my companion asked.

"Yes, he's in. Who wants him?"

"Tell him the Scotchman is out here."

The woman disappeared behind a door leading off from the rear of the counter. In the silence that followed her departure there was plainly heard the low mumble of voices; muffled voices of men in a little back room.

Presently, a man poked his head through the door, surveyed the scene, and beckoned the woman to let us pass. We stepped back of the counter, filed through a long, narrow, dark hallway and came into a room crowded with men sitting at tables.

Curtains pulled down, not a breath of air could have made its way into the room. The smoke was thick, so thick it could be cut with the wave of an arm.

Two seats were vacant. We sat down. A waiter stepped to the table.

"What'll y' have?" he asked.

"What've y' got?" he was asked in turn.

"Anything y' want," he said.

The order was given.

In the meantime, there was a chance to survey the surroundings. The motley crowd of men was anything but edifying. Some of them looked as if they had recently come from Chicago, run out of town by one of the gangs. One man was in a drunken stupor. They talked in

whispers. All had their hats on—so that when my friend removed his the others thought sure the house was pinched. The waiter was just then approaching the table. He turned on his heel and went back to another room, where the drinks were being "made-up." His next appearance was accompanied by the proprietor, who came over to make sure he had not been mistaken in the Scotchman.

Everything all right, the waiter came back with the two drinks ordered; but, from the first sip, there was one mind absolutely sure an attempt was being made to rid the world of a revenue officer. So we left the place, pronto, the glasses remaining filled.

Outside, in the fresh air, where there was plenty of room to speak, I asked in the vernacular, "How long has this been going on?"

"Oh," said my companion, "ever since prohibition, I believe. At least, I've 'ducked' in there anytime I wanted a drink."

"You must want one pretty badly to go in a place like that," I suggested. "How does any one breathe in there?"

"It just happened to be a busy night," he explained, "with a lot of men smoking. Otherwise, it's all right—although, of course, you can't expect to have garden service. Not with prohibition."

"You do expect to get service, though, even with prohibition?"

"Why, certainly," he responded; "why not?"

As one who remembered the Washington of old, the staid, dignified Washington of only a few years past, all this seemed like a certain sacrilege.

Everyone knows, of course, that the so-called kitchen cabinets assemble in apartments and homes every night in the year. There is no secret to the fact that drinking goes on ad lib. among all manner and classes of people. No one believes for a moment that the eighteenth amendment or the Volstead Act got rid completely of contraband liquors. Bootleggers flourish in every section, hi-jackers and gangsters ply their trade, and all the country is merry over a natural violation of a law that so many dislike; but with all that the idea of speak-easies in Washington seemed out of the picture.

Here is the Nation's Capital, where they made the law. Here in little back rooms men gather and violate the law.

"Well, you got a lot to learn, old-timer," said an old friend who was asked what he knew about the prevalence of the speak-easy in Washington.

"I firmly believe that there are as many speak-easies in Washington in proportion to its population as there are in any other city in America."

It sounds ridiculous.

"Take a trip with me if you don't believe it. I know my speak-easies."

They are, forsooth, in every section of the city. They are where you might least expect them and where you would naturally suppose they might be. They are in the rear of barber shops, atop garages, in basements of grocery stores, in near-beer parlors, in delicatessen stores—almost everywhere but the churches.

"Do the police know about all this?" one chaperon was asked.

"Yes, and no," was the answer.

Good folk will wonder why these places are not "turned in," as the process of informing on law violators is termed.

They are not turned in because those who are in a position to turn them in do not want them to be molested. That is one outstanding fact. Another is, persons who go merely on a sightseeing tour of speak-easies are not going to violate confidences. If a man takes another man, on the assumption that he is man enough to keep his observations to himself, nor give away exact addresses and names, that about ends the matter.

Reformers will say that this is a deplorable condition. Those who are against reformers, tooth and nail, will say, too, that this is a deplorable condition—that speak-easies should be a necessary evil; but men, they will tell you, want what they want when they want it. Hence, the speak-easy.

An old-time secret service man gave an interesting sidelight on prevalent conditions in Washington:

"It would take the entire police force of Washington, ever on the alert, to rid the city of speak-easies. Even then, I doubt if it could be done. If there were an arrest every hour in the day and night and 24 places closed a day, 24 new places would open on the morrow."

As it is, the law enforcement agents are unable to cope with the situation. Granted they are all honest men and true, there are not enough of them to go around. The only man who can really get next to a speak-easy in official form is the policeman on the block. Half the time he is so busy with other matters that this is impossible—say those familiar with the police system of administration.

So the speak-easy flourishes in Washington where laws are made. Further, there are speak-easies within the proverbial stone's throw of the Capitol Building itself—and it was only the other day that a prominent United States Senator made the open charge, in the public prints, that he could, if he so desired, purchase all the "likker" he wanted right under the dome of the Capitol.

Residents of the city recall, some with horror, the outstanding instance of disrespect for prohibition laws in the Capitol when a waiter, serving in the senatorial dining room, accidentally dropped a bottle of whisky on the marble floor.

That false move has since become one of the Nation's jokes—a waiter dropping a bottle of hootch in the Capitol restaurant.

Accidents will happen.

Bootleggers infest the Capitol, as the ply their trade in other buildings. Speak-easies flourish within the shadow of almost every Government office building in Washington.

There are some men, some men in Government service, who were in the habit, before prohibition, of going each day at the lunch hour and having cocktails before their meal.

They still do.

There are places, respectable places in the accepted sense, where those "in the know" may whisper in the ears of their waiters and have sparkling cocktails in cups placed before them as broth or bouillon—and no one casually looking on knows the difference.

"A grand old town this is, after all," confided an old toper one day after he had come back for a visit. "I was afraid they would have ruined Washington, but I wasn't here five minutes before I found a place where you can get the best booze this side of Canada."

"And how did you find it?" he was asked.

"Just stopped a man on a street corner and asked him where I could get a drink."

From this it would seem that certain valuable information is passed out rather freely. It is. 'Twould also seem that the proprietors of these places would be running extra risks in having every Tom, Dick, and Harry know of their places.

"How do you expect them to do business if they don't broadcast?" was one explanation.

"But suppose some 'informer' got hold of the same information, the location of a speak-easy?"

"Suppose he does?"

It seems that in that case there must be a raid, and that "evidence" must be produced. The wise manager of a speak-easy knows how to take care of all this. The evidence is ready, at a moment's warning, to go down the sink, or wherever it is evidence goes when they do not want it to go into court.

Of course, accidents will happen, even in the best regulated speak-easy—and when that takes place, an arrest, there is a fine, and the trouble of opening another place. Since it is all in the game and since profits are quick and enormous, so those in the know say the risk is worth the while in the estimation of many owners of speak-easies.

A casual canvass of Washington recently, turned up some 50 speak-easies, and all within the heart of the city. From hearsay evidence there are probably 200 more in the neighborhoods and the outskirts, maybe 1,000.

"You would not believe it, would you?" a resident was asked.

"Why not?" he responded. "Such things do happen. I am not a bit surprised, though some of my very close friends will certainly be amazed at the disclosure. There are some people, you know, who have ostrich blood in their veins. They just bow their heads and do not see a thing."

It was rather a wicked assignment given me to find out the speak-easies of Washington. Ever since the discovery that so many of them hold forth here, I have been suspected as one of the originators of the whispering campaign, but habit is habit. You just naturally get into the swing of it.

A mighty soft-spoken race of men is being developed down here on the banks of the Potomac. They learn the art of sotto voce in little back rooms.

SMUGGLING OF CANADIAN LIQUOR

Mr. BLEASE. Mr. President, I ask to have printed in the RECORD an article from the New York Times referring to the report of Mrs. Willebrandt. I was surprised to see that she should let the facts be published. I ask that the article may be printed in the RECORD as a part of my remarks.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

SEES A RISING FLOOD OF CANADIAN LIQUOR—MRS. WILLEBRANDT, IN SARGENT'S REPORT, SAYS SMUGGLING HAS REACHED $2,000,000 A MONTH—ROSE 75 PER CENT IN THREE YEARS—PROGRESS IS CITED IN CHECKING FLOW FROM VESSELS HOVERING OFF THE COASTS—MORE JUDGES HERE URGED—ATTORNEY GENERAL ALSO RECOMMENDS CONCENTRATING GOVERNMENT LEGAL ACTIVITIES IN DEPARTMENT

(Special to the New York Times)

WASHINGTON, December 3.—Attorney General Sargent submitted the annual report of the Department of Justice to Congress to-day, together with the reports of the Assistant Attorneys General in charge of the various branches of the department.

Mrs. Mabel Walker Willebrandt, in charge of prohibition enforcement, reports that the Government has reduced the smuggling of liquor into the country by rum ships on the high seas, but that liquor smuggled

from Canada, chiefly via the Great Lakes, has increased more than 75 per cent during the last three years.

Attorney General Sargent in his report concurs in the recent recommendation of the conference of senior circuit judges, presided over by Chief Justice William Howard Taft, which he transmits with his own report, for three additional district judges for the Southern District of New York, one additional judge for the second circuit, two additional district judges for the Eastern District of New York (instead of one as recommended last year), and one for the Southern District of Florida, and one additional circuit judge for the ninth circuit.

The Attorney General also recommends the consolidation of all the legal activities of the Government under the supervision of the Attorney General.

TELLS OF CANADIAN LIQUOR FLOW

Mrs. Willebrandt points out that it is possible to gauge the volume of liquor smuggled from Canada, because a substantial amount of it is cleared through the Canadian customs before the liquor runner proceeds "to violate the United States Customs in making delivery."

She says that 1,169,002 gallons of whisky were cleared in the fiscal years for export to the United States, and that the total Canadian value of all alcoholic beverages cleared from Canada for the United States in the same period was $24,397,958, or more than $2,000,000 a month. The figures represent an increase from 665,896 gallons in 1925, with a Canadian value of $10,772,988.

"No one would contend that all of the liquor which is smuggled across the northern boundary passes regularly through the Canadian customs," the report says. "The volume is probably much greater than these records will show. However, available data, which is taken from statistical bulletins issued by the Department of Trade and Commerce of Canada, indicates that this traffic is immense in its proportions and is increasing."

Referring to vessels, both domestic and foreign, captured in the contraband liquor trade, Mrs. Willebrandt's report says there were 370 domestic seizures during the year, whereas in 1925 there were 516, and 330 and 320 each in 1926 and 1927.

SHIPS HOVER OFF FLORIDA COAST

"One fact of interest respecting the last year," she says, "is that out of the total number of domestic vessels captured, 174, or 47 per cent, were seized in Florida waters or in that vicinity. In this region liquor cargoes are obtained for the most part directly from the Bahama Islands, and the hovering supply plays no important rôle. Also, the hovering ship is not involved in the contraband traffic that is carried on from Canada into the United States through the waterways of the Great Lakes."

Operators of foreign vessels with liquor supplies have become more wary since the extraterritorial conventions have received favorable construction by the Supreme Court and convictions in the courts, the report says.

St. Pierre and Miquelon, in the vicinity of the mouth of the St. Lawrence River, continues to be the main source of supply and operating base for the high-seas smugglers of the Atlantic coast, it continues.

"The falling off in foreign-ship seizures has become particularly noticeable during the year. Furthermore, of the 22 seizures which were effected during the year only 4 occurred during the latter half—that is, between January 1 and June 30, 1928. It would seem that this indicates that the Government has begun to get this particular situation in hand."

FIFTY-FIVE THOUSAND SEVEN HUNDRED AND TWENTY-NINE CRIMINAL CASES STARTED

Reviewing her enforcement activities throughout the United States, Mrs. Willebrandt reports that 55,729 criminal prohibition prosecutions were started during the year, an increase of 15,020 over 1927. Including cases left over from the previous year, 58,429 cases were ended, as follows: Convictions, 48,820; acquittals, 1,431; nolle prossed or discontinued, 6,114; quashed, dismissed, demurrer, etc., 2,064.

"There were 34 convictions to each acquittal," she said, "a gain of 1 over the preceding year." The aggregate of fines, forfeitures, and penalties imposed was much higher than during the previous year, the total being $7,303,563.28. Jail and prison sentences imposed reached a total of more than 7,700 years, an increase of 48 per cent. This is by far the highest aggregate of sentences imposed in one year since prohibition went into effect.

"Due to the use of the padlock provisions of the Volstead Act being constantly urged by this division, the number of permanent injunctions mounted to 3,999, an increase of 586 over the preceding year. There were 4,857 trials by jury, an increase of 1,110. Pleas of guilty numbered 45,295, an increase of 16,414."

Mrs. Willebrandt says that she intends to expand the recent practice of assigning special prosecutors to assist United States attorneys in handling liquor cases in certain sections of the country. She adds that plans have been made for a United States marshal's jail in New York City as a detention headquarters for Federal prisoners awaiting trial and transportation to Federal penitentiaries because the city authorities have notified the Government that they would receive no more Federal prisoners.

DRY CASES OVER HALF OF ALL

The 55,729 prohibition cases started during the year constituted more than half of all the criminal and civil cases commenced in that period to which the United States was a party. The total number of all cases was 104,067, according to the report of Assistant Attorney General John Marshall, in charge of administration, who also says the increase of all cases over 1927 was only 12,000, as compared with 15,000 for prohibition alone.

The 58,429 prohibition cases ended during 1927 were also more than half of all cases terminated, which was 106,961, according to Mr. Marshall's report. Mr. Marshall says that at the close of business on June 30, 51,774 cases of all kinds were pending, whereas Mrs. Willebrandt says 18,259 of her cases, all criminal, were pending on that date. The report of the senior circuit judges shows that the total number of criminal cases on the docket at the end of the fiscal year was 30,375, or less than twice the number of prohibition.

DIPLOMATIC IMMUNITY FROM PROHIBITION ACT

Mr. BLEASE. Mr. President, there appeared in the Washington Post of this morning an article relating to diplomatic immunity in connection with the enforcement of the prohibition act. I have had a good deal to say on this subject on this floor, and I am glad to see that Mr. Doran has at last ceased to be deaf, dumb, and blind. I ask that the article may be printed in the RECORD as a part of my remarks.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

TEN THOUSAND HERE HELD IMMUNE TO DRY LAW AS DIPLOMATS—HAMPER ENFORCEMENT, DORAN TELLS HOUSE COMMITTEE—$300,000,000 NEEDED ANNUALLY FOR EFFECTIVE CONTROL, HE ADDS—PRAISES MAJOR HESSE

There are 10,000 persons in Washington who have a certain diplomatic status and can therefore take liquor around unmolested, Dr. James M. Doran, the prohibition commissioner, told the House Appropriations Committee, according to a copy of the hearing made public yesterday.

The presence of these persons, Doran told the committee, is one of the things that makes prohibition enforcement here difficult. Although members of the committee were inclined to be critical, Doran defended Maj. Edwin B. Hesse, superintendent of police.

"I suppose," said Representative BYRNS, of Tennessee, "you saw in the paper several days ago—I think it was last Sunday—that article where they gave pictures of the locations where there are open saloons and bars running in the rear of buildings. I think it might be well to get the chief of police interested in cases of that sort."

"I think that Major Hesse has done what he could," replied Doran.

"With things like this in Washington at the present time?" remarked BYRNS.

"He is doing very good work," Doran went on. "He has only a very limited fund for the purchase of evidence. I know he has called that to my attention several times. My judgment is that the police department of Washington is doing pretty well on the job. However, I will say that the District of Columbia courts are, as a rule, pretty crowded, and it is not every easy to get a prompt trial of a liquor offender in the District of Columbia, especially second and third offenders, where jail sentences may be involved."

"But you know there are a number of public places where you can see bottles of liquor shown around?" put in Representative HARDY of Colorado.

Doran suggested that the bottles contained nonalcoholic beverages, and he then told about the 10,000 persons connected with embassies and legations.

"Can they take it around the street unmolested?" asked HARDY.

"On their person," Doran replied.

"And carry the bottles right out in public?"

"We can not take it away from them if they are connected in any capacity with the various embassies."

Effective prohibition enforcement would require $300,000,000 a year for policing the United States, exclusive of "a system of United States courts covering the land."

This admission was made to the House Appropriations Committee by Doctor Doran during his testimony.

While the key man in the dry régime perceived improvement in enforcing Volsteadism, with the "elimination to some extent of some of the abuses in the enforcement by reason of the lawless acts of officials," he declared that "the smuggling situation still presents a serious problem," and that "there is still a large movement (of liquor) from European ports, from the French Island of St. Pierre, and from some Central American and Mexican ports to the United States."

THE ENFORCEMENT OF THE PROHIBITION LAW

Mr. BLEASE. Mr. President, I ask to have printed in the RECORD an article from the News and Courier, of Charleston,

S. C., of the issue of Saturday morning, December 1, I hope that some of those who think that the prohibition law is being enforced, if they will not take an ordinary Senator's word for it, will take what the officers who have been elected by a large majority of the people of this country and those appointed state about it themselves. I want the law enforced to the letter and am opposed to its repeal, but let us deal fairly.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

SIXTEEN STILLS TAKEN BY FEDERAL MEN—PROHIBITION OFFICERS DESTROY 30,000 GALLONS OF MASH AND ARREST SIX

In an intensive postelection drive Federal prohibition agents, operating out of Charleston, have during the past few days captured 16 large stills in four counties and destroyed more than 30,000 gallons of mash. It has been the campaign since the extensive raids in July.

Six men, 238 fermenters, and 540 gallons of bootleg have been seized.

Falling first upon Berkeley—designated by Gov. John G. Richards as a "festering sore"—the officers from the office of deputy prohibition administrator for the eastern district gathered in all but five of their total bag of stills in that county.

Moving to Florence County, the two agents and others confiscated a 275-gallon wood and copper still and destroyed fourteen 60-gallon fermenters.

The raiders then moved to the Edisto section. One still was found in Aiken County, while two stills and a large amount of bootleg paraphernalia was confiscated in Barnwell County.

One of the Barnwell County stills yielded the largest amount of mash, almost half of the total bag. Along with a 125-gallon wood still, complete, twelve 700-gallon fermenters and fifteen 350-gallon fermenters, a superheater and a steam boiler, the agents got 13,650 gallons of mash and 50 gallons of corn liquor.

The captures range from the mammoth mash seizure to a petty find of 3½ gallons of corn whisky and from the big 700-gallon fermenters to tiny, in comparison, 60-gallon ones.

THE CONGRESSIONAL RECORD

Mr. HEFLIN. Mr. President, I ask the attention of the Senator from Kansas [Mr. CURTIS].

In February last I introduced a resolution to increase the number of copies of the CONGRESSIONAL RECORD allotted to Senators and Members of the House of Representatives. The apportionment we now have was enacted about 35 years ago. At that time the vote for President was about 10,700,000. We are now polling about 36,000,000 votes for President, and each Senator has only 88 copies of the RECORD and each Member of the House about 60. My bill provides for changing the old law and increasing the number to 300 copies for each Senator and 150 copies for each Member of the House.

This bill was referred to the Committee on Printing, but I do not think that the committee has considered it. I spoke to Senator MOSES, a member of the committee, about it, and he said he thought we could get together on it at the beginning of this session, and I am bringing it up now for the purpose of getting action on it, so that instead of having 88 copies of the daily CONGRESSIONAL RECORD each Senator will have 300 and each Member of the House 150. I want to get action now, or as early as possible, before we hand in our revised CONGRESSIONAL RECORD mailing list.

Mr. CURTIS. I suggest to the Senator that he take up the matter with the Senator from Minnesota [Mr. SHIPSTEAD], who is chairman of the Committee on Printing at this time.

Mr. HEFLIN. Very well; I will let it go over, then, and follow that course.

THE PRESIDENT'S ARMISTICE ADDRESS

Mr. SACKETT. I ask to have printed in the RECORD, on account of the numerous requests which have come to my office, the address of President Coolidge at the observance of the tenth anniversary of the armistice under the auspices of the American Legion.

There being no objection, the address was ordered to be printed in the RECORD, as follows:

Fellow countrymen, we meet to give thanks for 10 more years of peace. Amid the multitude of bounties which have been bestowed upon us, we count that our supreme blessing. In all our domestic and foreign relations our chief concern is that it should be permanent. It is our belief that it is coming to be more and more realized as the natural state of mankind. Yet, while we are placing our faith in more complete understandings which shall harmonize with the universal conscience, we ought not to forget that all the rights we now possess, the peace we now enjoy, have been secured for us by a long series of sacrifices and of conflicts. We are able to participate in this celebration because our country had the resources, the character, and the spirit to raise, equip, and support with adequate supplies an Army and a Navy which, by placing more than 2,000,000 men on the battle fields of Europe, contributed to the making of the armistice on the 11th day of November, 1918.

Our first thought, then, is to acknowledge the obligation which the Nation owes to those who served in our forces afloat and ashore, which contributed the indispensable factor to the final victory. Although all our people became engaged in this great conflict, some in furnishing money, some in producing food and clothing, some in making munitions, some in administering our Government, the place of honor will always be accorded to the men and the women who wore the uniform of our country—the living and the dead.

When the great conflict finally broke upon us we were unprepared to meet its military responsibilities. What Navy we possessed at that time, as is always the case with our Navy, was ready. Admiral Sims at once carried new courage and new energy to the contest on the sea. So complete was the defense of our transports that the loss by enemy attack in sending our land forces to Europe was surprisingly small.

As we study the record of our Army in France, we become more and more impressed by three outstanding features. The unity of the American forces and the integrity of the American command were always preserved. They were trained with a thoroughness becoming the tradition of McClellan, they were fought with a tenacity and skill worthy of the memory of Grant. And finally, they were undefeated. For these outstanding accomplishments, which were the chief sources of the glory of our arms, we are indebted to the genius of General Pershing.

It is unnecessary to recount with any detail our experience in the war. It was a new revelation, not only of the strength, but of the unity of our people. No country ever exhibited a more magnificent spirit or demonstrated a higher degree of patriotic devotion. The great organizing ability of our industrial leaders, the unexpected strength of our financial resources, the dedication of our entire man power under the universal service law, the farm and the factory, the railroad and the bank, 4,000,000 men under arms and 6,000,000 men in reserve, all became one mighty engine for the prosecution of the war. All together it was the greatest power that any nation on earth had ever assembled.

When it was all over, in spite of the great strain, we were the only country that had much reserve power left. Our foodstuffs were necessary to supply urgent needs; our money was required to save from financial disaster. Our resources delivered Europe from starvation and ruin.

In the final treaty of peace not only was the map of Europe remade, but the enormous colonial possessions of Germany were divided up among certain allied nations. Such private property of her nationals as they held was applied to the claim for reparations. We neither sought nor took any of the former German possessions. We have provided by law for returning the private property of her nationals.

Yet our own outlay had been and was to continue to be a perfectly enormous sum. It is sometimes represented that this country made a profit out of the war. Nothing could be further from the truth. Up to the present time our own net war costs, after allowing for our foreign-debt expectations, are about $36,500,000,000. To retire the balance of our public debt will require about $7,000,000,000 in interest. Our Veterans' Bureau and allied expenses are already running at over $500,000,000 a year in meeting the solemn duty to the disabled and dependent. With what has been paid out and what is already apparent, it is probable that our final cost will run well toward $100,000,000,000, or half the entire wealth of the country when we entered the conflict.

Viewed from its economic results, war is the most destructive agency that ever afflicts the earth. Yet it is the dead here and abroad who are gone forever. While our own losses were thus very large, the losses of others required a somewhat greater proportionate outlay, but they are to be reduced by territorial acquisitions and by reparations. While we shall receive some further credits on the accounts I have stated as our costs, our outlay will be much greater than that of any other country. Whatever may be thought or said of us, we know, and every informed person should know, that we reaped no selfish benefit from the war. No citizen of the United States needs to make any apology to anybody anywhere for not having done our duty in defense of the cause of world liberty.

Such benefits as came to our country from our war experience were not represented by material values but by spiritual values. The whole standard of our existence was raised; the conscience and the faith of the Nation were quickened with new life. The people awoke to the drumbeats of a new destiny.

In common with most of the great powers we are paying the cost of that terrible tragedy. On the whole, the war has made possible a great advance in self-government in Europe, yet in some quarters society was so near disintegration that it submitted to new forms of absolutism to prevent anarchy. The whole essence of war is destruction. It is the negation and the antithesis of human progress. No good thing ever came out of war that could not better have been secured by reason and conscience.

Every dictate of humanity constantly cries aloud that we do not want any more war. We ought to take every precaution and make every honorable sacrifice, however great, to prevent it. Still, the first law of progress requires the world to face facts, and it is equally plain that reason and conscience are as yet by no means supreme in human affairs. The inherited instinct of selfishness is very far from being eliminated; the forces of evil are exceedingly powerful.

The eternal questions before the nations are how to prevent war and how to defend themselves if it comes. There are those who see no answer, except military preparation. But this remedy has never proved sufficient. We do not know of any nation which has ever been able to provide arms enough so as always to be at peace. Fifteen years ago the most thoroughly equipped people of Europe were Germany and France. We saw what happened. While Rome maintained a general peace for many generations, it was not without a running conflict on the borders which finally engulfed the empire. But there is a wide distinction between absolute prevention and frequent recurrence, and peace is of little value if it is constantly accompanied by the threatened or the actual violation of national rights.

If the European countries had neglected their defenses, it is probable that war would have come much sooner. All human experience seems to demonstrate that a country which makes reasonable preparation for defense is less likely to be subject to a hostile attack and less likely to suffer a violation of its rights which might lead to war. This is the prevailing attitude of the United States and one which I believe should constantly determine its actions. To be ready for defense is not to be guilty of aggression. We can have military preparation without assuming a military spirit. It is our duty to ourselves and to the cause of civilization, to the preservation of domestic tranquillity, to our orderly and lawful relations with foreign people, to maintain an adequate Army and Navy.

We do not need a large land force. The present size of our Regular Army is entirely adequate, but it should continue to be supplemented by a National Guard and Reserves, and especially with the equipment and organization in our industries for furnishing supplies. When we turn to the sea the situation is different. We have not only a long coast line, distant outlying possessions, a foreign commerce unsurpassed in importance, and foreign investments unsurpassed in amount, the number of our people and value of our treasure to be protected, but we are also bound by international treaty to defend the Panama Canal. Having few fueling stations, we require ships of large tonnage, and having scarcely any merchant vessels capable of mounting 5 or 6 inch guns, it is obvious that, based on needs, we are entitled to a larger number of warships than a nation having these advantages.

Important, however, as we have believed adequate national defense to be for preserving order and peace in the world, we have not considered it to be the only element. We have most urgently and to some degree successfully advocated the principle of the limitation of armaments. We think this should apply both to land and sea forces, but as the limitation of armies is very largely a European question we have wished the countries most interested to take the lead in deciding this among themselves. For the purpose of naval limitation we called the Washington conference and secured an agreement as to capital ships and airplane carriers, and also as to the maximum unit tonnage and maximum caliber of guns of cruisers. But the number of cruisers, lesser craft, and submarines have no limit.

It no doubt has some significance that foreign governments made agreements limiting that class of combat vessels in which we were superior, but refused limitation in the class in which they were superior. We made altogether the heaviest sacrifice in scrapping work which was already in existence. That should forever remain not only a satisfaction to ourselves but a demonstration to others of our good faith in advocating the principle of limitations. At that time we had 23 cruisers and 10 more nearly completed. One of these has since been lost, and 22 are nearly obsolete. To replace these, we have started building 8. The British have since begun and completed 7, are building 8, and have 5 more authorized. When their present legislation is carried out they have 68 cruisers. When ours is carried out, we would have 40. It is obvious that, eliminating all competition, world standards of defense require us to have more cruisers.

This was the situation when I requested another conference, which the British and Japanese attended, but to which Italy and France did not come. The United States there proposed a limitation of cruiser tonnage of 250,000 to 300,000 tons. As near as we could figure out their proposal, the British asked for from 425,000 to 600,000 tons. As it appeared to us that to agree to so large a tonnage constituted not a limitation, but an extension of war fleets, no agreement was made.

Since that time no progress seems to have been made. In fact, the movements have been discouraging. During last summer France and England made a tentative offer which would limit the kind of cruisers and submarines adapted to the use of the United States, but left without limit the kind adapted to their use. The United States of course refused to accept this offer. Had we not done so, the French Army and the English Navy would be so near unlimited that the principle of limitations would be virtually abandoned. The nations have already accomplished much in the way of limitations and we hope may accomplish more when the preliminary conference called by the League of Nations is reconvened.

Meantime, the United States and other nations have been successfully engaged in undertaking to establish additional safeguards and securities to the peace of the world by another method. Throughout all history war has been occurring until it has come to be recognized by custom and practice as having a certain legal standing. It has been regarded as the last resort, and has too frequently been the first. When it was proposed that this traditional attitude should be modified between the United States and France, we replied that it should be modified among all nations. As a result, representatives of 15 powers have met in Paris and signed a treaty which condemns recourse to war, renounces it as a national policy, and pledges themselves not to seek to resolve their differences except by peaceful action.

While this leaves the questions of national defense and limitation of armaments practically where they were, as the negative supports of peace, it discards all threat of force and approaches the subject on its positive side. For the first time in the world the leading powers bind themselves to adjust disputes without recourse to force. While recognizing to the fullest extent the duty of self-defense, and not undertaking, as no human ingenuity could undertake, an absolute guaranty against war, it is the most complete and will be the most effective instrument for peace that was ever devised.

So long as promises can be broken and treaties can be violated, we can have no positive assurances, yet every one knows they are additional safeguards. We can only say that this is the best that mortal man can do. It is beside the mark to argue that we should not put faith in it. The whole scheme of human society, the whole progress of civilization, requires that we should have faith in men and in nations. There is no other positive power on which we could rely. All the values that have ever been created, all the progress that has ever been made, declare that our faith is justified.

For the cause of peace, the United States is adopting the only practical principles that have ever been proposed, of preparation, limitation, and renunciation. The progress that the world has made in this direction in the last 10 years surpasses all the progress ever before made.

Recent developments have brought to us not only a new economic but a new political relationship to the rest of the world. We have been constantly debating what our attitude ought to be toward the European nations. Much of our position is already revealed by the record. It can truthfully be characterized as one of patience, consideration, restraint, and assistance. We have accepted settlement of obligations, not in accordance with what was due but in accordance with the merciful principle of what our debtors could pay. We have given of our counsel when asked and of our resources for constructive purposes, but we have carefully refrained from all intervention which was unsought or which we believed would be ineffective, and we have not wished to contribute to the support of armaments. Whatever assistance we may have given to finishing the war, we feel free from any responsibility for beginning it. We do not wish to finance preparation for a future war.

We have heard an impressive amount of discussion concerning our duty to Europe. Our own people have supplied considerable quantities of it. Europe itself has expressed very definite ideas on this subject. We do have such duties. We have acknowledged them and tried to meet them. They are not all on one side, however. They are mutual. We have sometimes been reproached for lecturing Europe, but probably ours are not the only people who sometimes engage in gratuitous criticism and advice. We have also been charged with pursuing a policy of isolation. We are not the only people either who desire to give their attention to their own affairs. It is quite evident that both of these claims can not be true. I think no informed person at home or abroad would blame us for not intervening in affairs which are peculiarly the concern of others to adjust or when we are asked for help for stating clearly the terms on which we are willing to respond.

Immediately following the war we went to the rescue of friend and foe alike in Europe on the grounds of humanity. Later our experts joined with their experts in making a temporary adjustment of German reparations and securing the evacuation of the Ruhr. Our people lent $110,000,000 to Germany to put that plan into immediate effect. Since 1924 Germany has paid on reparations about $1,300,000,000, and our people have lent to national, State, and municipal governments and to corporations in Germany a little over $1,100,000,000. It could not be claimed that this money is the entire source from which reparations have been directly paid, but it must have been a large factor in rendering Germany able to pay. We also lent large sums to the governments and corporations in other countries to aid in their financial rehabilitation.

I have several times stated that such ought to be our policy. But there is little reason for sending capital abroad while rates for money in London and Paris are at 4 or 5 per cent, while ours are much higher. England is placing very considerable loans abroad; France has had large credits abroad, some of which have been called home.

Both are making very large outlays for military purposes. Europe on the whole has arrived at a state of financial stability and prosperity where it can not be said we are called on to help or act much beyond a strict business basis. The needs of our own people require that any further advances by us must have most careful consideration.

For the United States not to wish Europe to prosper would be not only a selfish, but an entirely unenlightened view. We want the investment of life and money which we have made there to be to their benefit. We should like to have our Government debts all settled, although it is probable that we could better afford to lose them than our debtors could afford not to pay them. Divergent standards of living among nations involve many difficult problems. We intend to preserve our high standards of living and we should like to see all other countries on the same level. With a whole-hearted acceptance of republican institutions, with the opening of opportunity to individual initiative, they are certain to make much progress in that direction.

It is always plain that Europe and the United States are lacking in mutual understanding. We are prone to think they can do as we can do. We are not interested in their age-old animosities, we have not suffered from centuries of violent hostilities. We do not see how difficult it is for them to displace distrust in each other with faith in each other. On the other hand, they appear to think that we are going to do exactly what they would do if they had our chance. If they would give a little more attention to our history and judge us a little more closely by our own record, and especially find out in what directions we believe our real interests to lie, much which they now appear to find obscure would be quite apparent.

We want peace not only for the same reason that every other nation wants it, because we believe it to be right, but because war would interfere with our progress. Our interests all over the earth are such that a conflict anywhere would be enormously to our disadvantage. If we had not been in the World War, in spite of some profit we made in exports, whichever side had won, in the end our losses would have been very great. We are against aggression and imperialism not only because we believe in local self-government, but because we do not want more territory inhabited by foreign people. Our exclusion of immigration should make that plain. Our outlying possessions, with the exception of the Panama Canal Zone, are not a help to us, but a hindrance. We hold them, not as a profit, but as a duty. We want limitation of armaments for the welfare of humanity. We are not merely seeking our own advantage in this, as we do not need it, or attempting to avoid expense, as we can bear it better than anyone else.

If we could secure a more complete reciprocity in good will, the final liquidation of the balance of our foreign debts, and such further limitation of armaments as would be commensurate with the treaty renouncing war, our confidence in the effectiveness of any additional efforts on our part to assist in the further progress of Europe would be greatly increased.

As we contemplate the past 10 years, there is every reason to be encouraged. It has been a period in which human freedom has been greatly extended, in which the right of self-government has come to be more widely recognized. Strong foundations have been laid for the support of these principles. We should by no means be discouraged because practice lags behind principle. We make progress slowly and over a course which can tolerate no open spaces. It is a long distance from a world that walks by force to a world that walks by faith. The United States has been so placed that it could advance with little interruption along the road of freedom and faith.

It is befitting that we should pursue our course without exultation, with due humility, and with due gratitude for the important contributions of the more ancient nations which have helped to make possible our present progress and our future hope. The gravest responsibilities that can come to a people in this world have come to us. We must not fail to meet them in accordance with the requirements of conscience and righteousness.

CALLING OF THE ROLL

The PRESIDING OFFICER. The morning business is closed.

Mr. CURTIS. Mr. President, I suggest the absence of a quorum.

The PRESIDING OFFICER. The Secretary will call the roll.

The Chief Clerk called the roll, and the following Senators answered to their names:

Ashurst	Caraway	Gillett	Kendrick
Barkley	Copeland	Glass	Keyes
Bayard	Couzens	Glenn	King
Bingham	Curtis	Goff	Locher
Black	Dale	Greene	McKellar
Blaine	Dill	Hale	McMaster
Blease	Edge	Harris	McNary
Borah	Edwards	Harrison	Metcalf
Bratton	Fess	Hawes	Neely
Brookhart	Fletcher	Hayden	Norris
Broussard	Frazier	Heflin	Nye
Bruce	George	Johnson	Oddie
Capper	Gerry	Jones	Overman
Phipps	Sheppard	Swanson	Walsh, Mass.
Pine	Shipstead	Thomas, Idaho	Walsh, Mont.
Pittman	Shortridge	Thomas, Okla.	Warren
Ransdell	Simmons	Trammell	Waterman
Reed, Pa.	Smith	Tydings	Wheeler
Robinson, Ark.	Smoot	Tyson	
Sackett	Steiwer	Vandenberg	
Schall	Stephens	Wagner	

Mr. SHEPPARD. I wish to announce that my colleague [Mr. MAYFIELD] is unavoidably absent on account of illness. This announcement may stand for the day.

Mr. NORRIS. I desire to announce that my colleague the junior Senator from Nebraska [Mr. HOWELL] is absent on account of illness.

Mr. McMASTER. I desire to announce that my colleague the senior Senator from South Dakota [Mr. NORBECK] is unavoidably absent from the Senate.

The PRESIDING OFFICER. Eighty-one Senators having answered to their names, a quorum is present.

BOULDER DAM

Mr. JOHNSON. Mr. President, I ask that the unfinished business be laid before the Senate, and proceeded with.

There being no objection, the Senate, as in Committee of the Whole, resumed the consideration of the bill (H. R. 5773) to provide for the construction of works for the protection and development of the lower Colorado River Basin, and for the approval of the Colorado River compact, and for other purposes.

The PRESIDING OFFICER. The pending question is on the amendment offered by the senior Senator from California [Mr. JOHNSON] in the nature of a substitute.

Mr. HAYDEN. Mr. President, yesterday, just prior to the adjournment of the Senate, I offered an amendment to the Senate bill that has been offered as a substitute for House bill 5773, which relates to an apportionment of the waters of the Colorado River to the lower basin of that stream. The amendment was taken from the CONGRESSIONAL RECORD of May 28, 1928. On that date the senior Senator from Nevada [Mr. PITTMAN] asked to have the amendment printed in the CONGRESSIONAL RECORD, for the information of the Senate.

The PRESIDING OFFICER (Mr. FESS in the chair). May the Chair ask the Senator whether the amendment he has in mind has been offered and is now pending?

Mr. HAYDEN. If it has not been, I intend to offer it very soon.

The PRESIDING OFFICER. The clerks at the desk want to know the status. It has not been offered yet, it appears.

Mr. HAYDEN. I shall offer the amendment in a few moments.

At the time to which I have just referred the Senator from Nevada stated that at a conference held in the city of Denver during the summer of 1927, at the instance of the Governors of the States of New Mexico, Colorado, Utah, and Wyoming, there were present governors and commissioners from the States of Nevada, Arizona, and California. The subject of paramount importance, the subject that was the most discussed at that conference, was an adjustment of the differences between the States of Arizona and California with respect to an apportionment of the waters of the lower Colorado River Basin, in order that, if those two States might be brought into accord, the Colorado River compact, which affected the entire seven States, might be ratified and approved by all of the States.

Each of the States in the lower basin was called upon to submit to the Denver conference a statement of the quantity of water they desired to obtain out of the Colorado River. At the time the conference was held it was thought that there were but seven and a half million acre-feet of water to divide, and upon that basis the senior Senator from Nevada stated to the Senate that the governors of the upper-basin States recommended that there be awarded to the State of California 4,200,000 acre-feet, to the State of Arizona 3,000,000 acre-feet, and to the State of Nevada 300,000 acre-feet.

The Senator explained in his remarks how the four governors arrived at that apportionment, and said that it was done under article 3 of the Colorado River compact, paragraph (a) of which reads as follows:

> There is hereby apportioned from the Colorado River system in perpetuity to the upper basin and to the lower basin, respectively, the exclusive beneficial consumptive use of 7,500,000 acre-feet of water per annum, which shall include all water necessary for the supply of any rights which may now exist.

The Senator then stated that subsequently it was discovered that there was an additional million acre-feet of water apportioned to the lower basin which could be divided. The idea of dividing that additional apportionment of water did not occur

to the governors and the representatives of the lower basin States at the time of the Denver conference.

The Senator then read to the Senate this provision of the compact, which is paragraph (b) of article 3:

In addition to the apportionment in paragraph (a), the lower basin is hereby given the right to increase its beneficial consumptive use of such waters by 1,000,000 acre-feet per annum.

Senator PITTMAN stated further that at conferences held in his office during the last session of Congress the suggestion had been made that the additional million acre-feet be divided equally between Arizona and California, and that if that were done the total quantity of water apportioned to the State of California under the Colorado River compact out of the total amount allocated to the lower basin would be 4,700,000 acre-feet, or 100,000 acre-feet more than California had asked for at Denver, and that by adding 500,000 acre-feet to the 3,000,000 acre-feet apportioned to Arizona on the basis recommended by the four upper basin governors that State would receive 3,500,000 acre-feet, or within 100,000 acre-feet of what had been requested by her commissioners at Denver.

The Senator from Nevada then stated that, based upon the recommendations made by the upper basin governors plus an equal division of the additional 1,000,000 acre-feet, Mr. Francis B. Wilson, interstate river commissioner of the State of New Mexico, had prepared an amendment which the Senator asked to have printed in the RECORD. He did not offer it at that time, but merely asked to have it printed for the information of the Senate. I now offer that amendment to the bill.

The PRESIDING OFFICER. The clerk will read the amendment.

The CHIEF CLERK. The amendment proposes to strike out all of section 4 (a) as it appears in the substitute and to insert:

SEC. 4 (a). This act shall not take effect and no authority shall be exercised hereunder, unless and until the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming shall have ratified the Colorado River compact mentioned in section 12 hereof, and the President, by public proclamation, shall have so declared: *Provided*, That the ratification act of the State of California shall contain a provision agreeing that the aggregate annual consumptive use by that State of waters of the Colorado River shall never exceed 4,200,000 acre-feet of the water apportioned to the lower basin by paragraph (a) of Article III of said compact, and that the aggregate beneficial consumptive use by that State of waters of the Colorado River shall never exceed 500,000 acre-feet of the water apportioned by the compact to the lower basin by paragraph (b) of said Article III; and that the use by California of the excess or surplus waters unapportioned by the Colorado River compact shall never exceed annually one-half of such excess or surplus waters; and that the limitations so accepted by California shall be irrevocable and unconditional, unless modified by the agreement described in the following paragraph, nor shall said limitations apply to water diverted by or for the benefit of the Yuma reclamation project for domestic, agricultural, or power purposes except to the portion thereof consumptively used in California for domestic and agricultural purposes.

The said ratifying act shall further provide that if by tri-State agreement hereafter entered into by the States of California, Nevada, and Arizona the foregoing limitations are accepted and approved as fixing the apportionment of water to California, then California shall and will therein agree (1) that of the 7,500,000 acre-feet annually apportioned to the lower basin by paragraph (a) of Article III of the Colorado River compact, there shall be apportioned to the State of Nevada 300,000 acre-feet and to the State of Arizona 3,000,000 acre-feet for exclusive beneficial consumptive use in perpetuity, and (2) of the 1,000,000 acre-feet in addition which the lower basin has the right to use annually by paragraph (b) of said article, there shall be apportioned to the State of Arizona 500,000 acre-feet for beneficial consumptive use, and (3) that the State of Arizona may annually use one-half of the excess or surplus waters unapportioned by the Colorado River compact, and (4) that the State of Arizona shall have the exclusive beneficial consumptive use of the Gila River and its tributaries within the boundaries of said State, and (5) that the waters of the Gila River and its tributaries shall never be subject to any diminution whatever by any allowance of water which may be made by treaty or otherwise to the United States of Mexico, but if, as provided in paragraph (c) of Article III of the Colorado River compact, it shall become necessary to supply water to the United States of Mexico from waters apportioned by said compact, then the State of California shall and will mutually agree with the State of Arizona to supply one-half of any deficiency which must be supplied to Mexico by the lower basin, and (6) that the State of California shall and will further mutually agree with the States of Arizona and Nevada that none of said three States shall withhold water and none shall require the delivery of water which can not reasonably be applied to domestic and agricultural uses, and (7) that all of the provisions of said tri-State agreement shall be subject in all particulars to the provisions of the Colorado River compact.

On page 21, line 13, after the word "approval," strike out lines 13, 14, 15, and 16, to the word "date," inclusive, and on line 16 strike out the words "in the latter case," and on line 22 strike out the words "prior to June 1, 1928."

On page 22 strike out all of lines 22, 23, and 24, and on page 23 all of lines 1 to 7, inclusive.

On page 27, line 21, after the word "Dam," strike out the semicolon and insert a period, and strike out all of line 21 thereafter, and all of lines 22 and 23, and on page 28 all of lines 1, 2, 3, and 4.

On page 29, line 21, after the word "States," strike out the comma, insert a period, and strike out the remainder of the line, and all of lines 22 and 23, and on page 30 all of lines 1 to 5, inclusive.

Mr. HAYDEN. Mr. President, to one who is unfamiliar with the water situation in the Colorado River Basin, this amendment may appear to be somewhat complicated, but it deals with a most complicated subject and the purpose sought to be accomplished could not be expressed in a less number of words. However, if one will study the amendment he will find that it is based upon admitted facts, is based upon sound reason, and that it will accomplish the desire of all of the States in the Colorado River Basin, to wit, bring about a complete and unconditional ratification of the Colorado River compact.

Mr. KING. Mr. President, will the Senator yield?

Mr. HAYDEN. I yield.

Mr. KING. I want to interpret properly the statement just made by the Senator. As I understand the amendment just tendered, there is no reference to power.

Mr. HAYDEN. None at all.

Mr. KING. So that the Senator means, then, that if the provision contained in the amendment just read, disposing of the waters of the Colorado River as between the upper and the lower States and particularly between the lower States, were adopted, there is nothing to prevent a ratification of the compact.

Mr. HAYDEN. I can state very frankly to the Senator that the people of Arizona are vastly more concerned with respect to an apportionment of the waters of the Colorado River than they are with respect to any prospective revenue they might obtain from power. I do not believe I could illustrate that any better, in reply to the Senator, than by reading a statement very recently made by one of the Arizona Colorado River commissioners.

Mr. Henry S. McCluskey, one of the Arizona Colorado River commissioners, on November 27, addressed the national convention of the American Federation of Labor in New Orleans in behalf of the State of Arizona and in opposition to a resolution, which the delegates from California hoped would be adopted, indorsing the particular measure, the Swing-Johnson bill, which is now pending before the Senate. Mr. McCluskey then said:

This particular matter deals with water. Water is the lifeblood of the States in the western part of this country. Water is something that they do not trifle with or fool with. Water is something that they fight and die for.

Mr. McCluskey then continued:

Now, a great deal has been said during this controversy that it is a conflict between the Power Trust and those interested in Government development. I want to say to you with all of the earnestness that I am capable of that the power question involved in this controversy is of minor importance. The question that is involved here is a question that it is a fact that the entire normal low flow of the Colorado River has been appropriated and put to beneficial use. No further agricultural development may be made unless the waters of the Colorado River are stored. Seventy-five per cent of the water in the river comes down through a period of three months, and during this time it averages from a minimum flow of 6,000,000 acre-feet to a maximum of 24,000,000 to 27,000,000 acre-feet. There is not enough water in the Colorado River and never will be to irrigate all the land in the United States that it is capable of irrigating from that great stream, and because there is not enough water to irrigate all the land that is capable of being irrigated is the reason for the controversy.

Power is a secondary consideration, because under the law of all the Western States navigation is the last use, and power comes next. Every other use precedes the use of water for power.

I am sure that the senior Senator from California [Mr. JOHNSON] will agree with me, as will everyone else who has had any contact with the Arizona Colorado River Commission, that there has been no individual authorized to speak for the State of Arizona who has taken a more aggressive position than Henry S. McCluskey. Yet publicly, and less than 10 days ago, he made the statement that I have just read, in which I am sure everyone in Arizona authorized to represent that State

will concur. In other words, the State of Arizona is vastly more concerned with respect to an equitable apportionment of the waters of the Colorado River than we are with respect to any income that might be derived from power.

It is obvious to anyone who stops to think for a moment that what I have said must be true. An income from power might aid in reducing taxes to a moderate degree. It might provide funds to construct roads or to build schoolhouses. It might interest the present generation, perhaps, from that financial angle. But so far as the future of the State is concerned, so far as making of Arizona the great State that we hope to see it be, that can only be accomplished by the irrigation and reclamation of our desert lands. We have within that State vast areas of land—land enough, in the opinion of many people in the State, to use all of the water of the Colorado River. There is also more land in the State of California than can be irrigated if the rights of the other Colorado River States are protected. Mr. McCluskey spoke the truth when he said there was not water enough to go around. There must be a division of the water. The upper-basin States have very properly insisted that all water necessary for their future growth and development shall be protected by a complete and unconditional ratification of the Colorado River compact.

If the Senate will bear with me, I want to invite attention to a fact which many persons seem to have overlooked, that in all of the acts of the seven State legislatures authorizing the appointment of commissioners to negotiate the Colorado River compact and in the act of Congress authorizing the appointment of a Federal representative, in each and every instance it was contemplated by the State legislatures and it was contemplated by the act of Congress that the commissioners so appointed would apportion and allocate to each one of the seven States its particular share of the water. The act of Congress approved August 19, 1921, authorizing the appointment of a Federal representative, states:

> That consent of Congress is hereby given to the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming to negotiate and enter into a compact or agreement not later than January 1, 1923, providing for an equitable division and apportionment among said States of the water supply of the Colorado River and of the streams tributary thereto.

The Arizona Legislature, in authorizing the appointment of a commissioner to negotiate the compact, provided:

> The Governor of Arizona shall appoint the State water commissioner * * * for the purpose of negotiating and entering into a compact or agreement between the said States, and between said States and the United States, with the consent of Congress, respecting the further utilization and disposition of the waters of the Colorado River and streams tributary thereto, and fixing and determining the rights of the said States and the rights of the United States in and to the use and disposition of the waters of said stream and the benefits to be derived therefrom.

The California Legislature authorized the appointment of a commissioner by the governor of the State for the purpose of—

> fixing and determining the rights of each of said States and the rights of the United States in and to the use, benefit, and disposition of the waters of the Colorado River and its tributaries.

The same is true of the acts of the legislatures of all the rest of the seven States. But when the commissioners assembled, when Mr. Hoover, as chairman of the commission, who was appointed by President Harding as the Federal representative to negotiate the Colorado River compact, met with the State commissioners and attempted to apportion the water to each one of the States, it was discovered that it was an impossible thing to do in the light of the knowledge then possessed by those who spoke for each of the States. It appeared as though the entire proposal would fall through without any accomplishment at all.

I am told that the suggestion came from Mr. Hoover that whereas they had found it impossible to apportion and allocate to each individual State the quantity of water which it should be entitled to receive from the Colorado River for all time, that they take at least the first step and divide the waters of the Colorado River for use of two basins.

That was done, and that was all that was done by the Colorado River Commission. There was apportioned to the upper basin in perpetuity 7,500,000 acre-feet of water and there was apportioned to the lower basin in perpetuity 7,500,000 acre-feet of water. The lower basin in addition thereto was allowed to appropriate annually 1,000,000 acre-feet, making a total apportionment to the lower basin of 8,500,000 acre-feet. But within each basin the compact contemplated that when the proper time arrived the States concerned should make a supplemental agreement to divide the water thus allocated to them.

So far as the upper basin is concerned, no agreement of that kind is now necessary, and may not be necessary for many years to come. It so happens that the tributaries of the Colorado River in the upper basin naturally divide the water. If the time does arrive when it is necessary, for instance, that there should be an understanding between the States of Utah and Wyoming with respect to an apportionment of the waters of the Green River, the compact provides that upon the request of the governor of one of those States the governor of the other State shall appoint commissioners, who shall meet commissioners from the first State, and if they reach an agreement that agreement shall be submitted to the legislatures of the two States for approval. The same procedure is authorized in the lower basin with respect to any apportionment of the waters allocated to that basin.

The States of the upper basin, as I said, are not immediately concerned about an apportionment among themselves. Climatic conditions are such that the production of agricultural products in the upper basin is less than in the lower basin; that is, the growing season is shorter. At the present moment the transportation facilities are not as satisfactory as they are in the southern basin. For the character of crops that can be produced in the upper basin, the freight rates are high and, therefore, there is no immediate prospect that there will be any great increase in agricultural development in the upper basin.

In the lower basin, however, the condition is very, very different. We have adequate railroad transportation facilities, the land to be irrigated is not distant from seaports, there is an excellent market for the winter fruits and vegetables which can be produced. It naturally follows that there is an immediate demand for the irrigation of additional areas of arid lands in the lower basin. The State of Arizona is, therefore, interested in an apportionment of the waters of the lower basin. That is what the amendment which I have offered proposes to do.

Mr. KING. Mr. President, will the Senator yield?

The PRESIDING OFFICER. Does the Senator from Arizona yield to the Senator from Utah?

Mr. HAYDEN. I yield.

Mr. KING. This is more of a statement than an interrogatory. The importance of the issues involved leads me to make an earnest appeal to the Senators from California and Arizona to find some common ground upon which they can stand, and so remove all obstacles that prevent ratification of the 7-State compact. I am sure that the Senators referred to appreciate the fact that the upper States, in view of the doctrine of appropriation and the apparent position of the Supreme Court of the United States upon the question of priorities are somewhat at the mercy of the lower States. The junior Senator from Arizona has just stated that California occupies a superior position because she can immediately take steps to appropriate a considerable portion of the waters which may be stored in the contemplated reservoir at Boulder Canyon, as well as all of the waters of the Colorado River which flow in the lower basin during the summer months. If the rule of law is—as was contended at the last session of Congress when this bill was under discussion, by Senators, including my friend from Wyoming [Mr. KENDRICK]—that the law of appropriation applies to States as it does to individuals, that it has an interstate application as well as an intrastate application, then it is obvious that Utah, Colorado, Wyoming, and New Mexico are placed at a great disadvantage.

If California and Arizona, or either, are at liberty to make appropriations that will call for all the unappropriated waters of the Colorado River, then the upper States, which may not now be ready to appropriate their just share of the same, will suffer irreparable loss. California and Arizona ought not to put the upper States in a position of jeopardizing their rights to the use of the waters of the river in the future. Colorado, Wyoming, Utah, and New Mexico furnish more than 80 per cent of the waters of the Colorado River. California furnishes none, and Arizona perhaps 15 per cent. It seems to me that those representing Arizona and California should appreciate the just claims of the upper States and the danger to which they are exposed by controversies which delay the ratification of the Sante Fe compact. They should pursue no course that would harm the upper basin, even though in so doing it would inure to the advantage of California and Arizona. In my opinion, Arizona and California should make reasonable and fair concessions to reach an agreement so that the 7-State compact may be promptly ratified.

With the ratification of that compact the rights of the upper States would be reasonably protected unless there should be any considerable flow of water aside from that which is now used in Mexico, into that country, and rights thereby initiated. In that event our rights as well, perhaps, as the rights of California

and of Arizona might be jeopardized. While it is true that Mexico would have no right to the use of waters impounded by the United States in the Boulder Dam Reservoir, nevertheless if for a considerable length of time the waters of the Colorado River should flow into Mexico and new land should be brought under cultivation, and property of value created, there might be a situation presented which, if presented to an international tribunal, might prove embarrassing to the United States and disquieting to American citizens living in the Colorado River Basin. There might at least be a moral ground upon which Mexico and her inhabitants might make an appeal to an international court to award to them a portion of the waters of the Colorado River. The claim might be made that the upper States had slept upon their rights, while a friendly neighboring nation in good faith had made appropriation and had developed cities or towns or, at least, had brought thousands of acres of land under cultivation.

So I repeat that California and Arizona, in the interest of good fellowship and neighborliness as between themselves, and with a proper regard for the rights of the people of Utah, Wyoming, Colorado, and New Mexico ought to find some basis upon which they may get together and ratify the 7-State compact. Neither a 6-State compact or a 5-State compact would place the upper States in a position of security. The compact must be ratified by all the States interested in the Colorado River. It may be 10 or 20 years or longer before the upper basin States will be ready to apply to beneficial use the entire 7,500,000 acre-feet accorded them under the compact, and unless there is a ratification by all of the seven States the rights of the upper States will be jeopardized. The guaranty of California that she will use no more than 4,600,000 acre-feet will not afford ample protection to the upper States.

The guaranty of Arizona that she would use no more than a certain amount would, of course, strengthen the assurance of the upper States as to their rights. It appears to me that the differences between California and Arizona are not so great or important as to prevent an agreement being reached.

As I understand the junior Senator from Arizona, he has stated that the paramount consideration upon the part of the State of Arizona is to get sufficient water. I agree with the Senator that the great plains of Arizona need water from the Colorado River. There are, in Arizona, from 500,000 to 1,000,000 acres of as fine land as can be found upon the continent, which are susceptible of reclamation, and which if irrigated from the waters of the Colorado River would develop cities and towns of considerable magnitude and afford homes for thousands and tens of thousands of people. It is a potential resource not only for Arizona but for the people of the United States. Arizona will be a home for thousands and tens of thousands of people if her rights in the Colorado River can be protected.

There is a difference now of 400,000 acre-feet between the two States. I do not pretend to determine which of the two States is right in this controversy, although I will say frankly to my friend from California that my sympathies have been with Arizona in some phases of the issues between the two States. I have felt that California has been rather too exacting, and that the rights of Arizona under the Constitution have not been fully recognized. In view of the fact that California furnishes no part of the water, that the dam site is in Nevada and Arizona, it has seemed to me that California ought to modify the demands which she has made. If there are only 400,000 acre-feet dividing the two States, I suggest to the Senator that earnest efforts in the most conciliatory and Christianlike spirit should be made between the representatives of the two States to reach some common ground so that the compact may be ratified.

I make no comment at this time—I may later on—in regard to the scheme which has been proposed in the pending bill, but I do make an earnest appeal to my friends from Arizona and California to reach an agreement upon all controversial matters.

Mr. HAYDEN. Mr. President, in reply to the junior Senator from Utah, permit me to say that, so far as I am personally concerned, I shall exercise every ability at my command, I shall do everything humanly possible, to bring about a fair, just, reasonable, and prompt settlement of this controversy. My purpose this afternoon in addressing the Senate is not only that the Senate itself may be informed of the nature of the controversy, but I hope before I conclude that I shall be able to convince even the senior Senator from California that the amendment which I have offered, the amendment prepared by Mr. Francis C. Wilson, of New Mexico, the interstate river commissioner of that State, an able and a disinterested person, is an amendment under which both the State of California and the State of Arizona may live and prosper.

I ask the particular attention of the senior Senator from California during the afternoon to the statement that I shall make. Whether or not anyone else in the Senate listens to me, I should appreciate the courteous attention of the senior Senator from California. I shall not ask him to immediately express any opinion upon the amendment, because I realize that it is a matter of very grave importance to his State, and I am sure that he will want to study it very carefully. After he has had an opportunity to study the amendment, I shall greatly appreciate hearing from him in detail as to how and in what particular the amendment is not satisfactory to him or to his constituents.

Mr. KING. Mr. President——

The PRESIDING OFFICER. Does the Senator from Arizona yield to the Senator from Utah?

Mr. HAYDEN. I yield.

Mr. KING. Is it the purpose of the Senator to explain the amendment? Some of us have not had a chance to study it; indeed, I only heard the latter part of it read.

Mr. HAYDEN. That is exactly what I intend to do. For the benefit of the Senate generally, I may say that from conversations with various Senators there seems to be an idea that we are seeking to accomplish by means of a compact affecting the Colorado River something that is extraordinary and unusual, something that has not been done before; whereas, in truth and in fact, there have been a large number of compacts between the States of the Union to settle their differences. Under the compact clause of the Constitution two or more States may enter into an agreement, but any such agreement is not effective unless it is ratified by Congress.

Very briefly let me allude to the Delaware River compact which is now pending between the States of Pennsylvania, New York, and New Jersey. The Delaware River compact defines the Delaware River Basin, just as the Colorado River compact defines the Colorado River Basin. The Delaware River compact divides the drainage area into an upper basin and a lower basin, just as the Colorado River compact divides the Colorado River drainage area into two basins. The Delaware River compact then apportions the waters of the Delaware River as follows: To Pennsylvania 328,500,000,000 gallons; New Jersey, 219,000,000,000 gallons; New York, 219,000,000,000 gallons; just as the Colorado River compact apportions the quantities of water. So we are not asking in this legislation, which provides for the approval of the Colorado River compact, anything new or novel or strange; but are following the accustomed path in determining interstate rights in the waters of a stream.

The Colorado River compact, as I have said, is of the greatest importance to the States of the upper basin. The man more responsible than any other for the initiation of the idea that there should be a compact between the seven States to determine their relative rights to the water of the Colorado River is Mr. Delph E. Carpenter, interstate river commissioner for the State of Colorado. He is one of the greatest authorities on water rights in America and is known as the father of the Colorado River compact. For the information of the Senate, I wish to read two very brief extracts from his testimony before the House Committee on Irrigation and Reclamation. Mr. Carpenter said:

> The Colorado River compact was conceived and concluded for the purpose of protecting the autonomy of the States, of defining the respective jurisdictions of the States, and of the United States, and of assuring the future prosperity of that immense part of our national territory. With it there will be no overriding of State authority by national agencies. Otherwise interstate and State-National conflict, strife, rivalry, and interminable litigation will be inevitable.
>
> * * * * * * *
>
> The upper States have always insisted that an interstate compact approved by the seven Colorado River States and by Congress be adopted as a prerequisite to any further major construction, either in the upper basin or the lower basin of the Colorado River drainage, as a protection against a repetition of long years of unfortunate bureaucratic oppression and interstate strife, aggravated and encouraged by governmental agencies acting through individuals inspired by ambition to substitute Federal control for State authority over a subject matter properly within the jurisdiction of the States.

Not longer than a year ago the governors and commissioners of the upper basin States adopted a resolution urging the approval of the Colorado River compact before the enactment of any legislation by Congress. The preamble of the resolution reads as follows:

> Whereas it is the conviction of the Governors and Interstate Water Commissioners and other representatives of the States of Colorado, New Mexico, Utah, and Wyoming, the four States of the Upper Basin of the Colorado River, that the interstate agreement embodied in form by the Colorado River compact as negotiated at Santa Fe N. Mex., in November, 1922, should be completed and placed in full force and

effect through approval and acceptance by the seven Colorado River States in order that the way may be properly cleared for the orderly development of the Colorado River.

That declaration was signed by Governor Adams, of Colorado; Governor Dern, of Utah; Governor Emerson, of Wyoming; Edward Sargeant, Lieutenant Governor of New Mexico; Delph E. Carpenter, interstate river commissioner for California; Francis C. Wilson, interstate river commissioner for New Mexico; L. Ward Bannister, counsel for the city of Denver; M. C. Mechem, representing New Mexico; and William L. Boatright, attorney general of Colorado. No more representative group of men could be assembled to speak for the interests of the upper basin States than those whose names I have recited. They and all like them in the upper basin who thoroughly understand the situation are insistent that there shall be a 7-State ratification of the Colorado River compact in order to provide complete protection to the water rights of the upper basin States.

Mr. BRATTON. Mr. President——

Mr. HAYDEN. I yield to the Senator from New Mexico.

Mr. BRATTON. The junior Senator from Arizona is now discussing the attitude of the upper-basin States with reference to the importance of a 7-State ratification. That is very much to be desired. It is very conducive to an orderly adjustment of the entire important situation. I will remove and put aside the possibility of controversy and disputation.

The upper-basin States are vitally concerned in this subject matter. I believe we are told that the upper-basin States contribute about 84 per cent of the volume of water in the river system. The controversy—that is, the active, overt controversy thus far—has been waged between Arizona and California. It relates to water of which the upper-basin States furnish 84 per cent. The junior Senator from Utah [Mr. KING] has set forth so clearly our desire for an adjustment of this controversy that anything more on the subject would be superfluous.

The Senator from Arizona now is proposing an amendment to this legislation looking to an adjustment of the differences between Arizona and California. As I understand the purport of the amendment, it is to provide that in the act of ratification the State of California shall obligate herself not to claim more than 4,200,000 acre-feet annually of the apportioned water, and no more than 500,000 acre-feet annually of the unallocated or unapportioned water.

Mr. HAYDEN. No; the Senator has not had an opportunity, perhaps, to read the amendment carefully.

Mr. BRATTON. I have not read it carefully, and I shall appreciate it if the Senator will correct me.

Mr. HAYDEN. The provision in the amendment is that the State of California shall agree not to use more than 4,200,000 acre-feet of the water apportioned in perpetuity to the lower basin, and not more than 500,000 acre-feet of the additional 1,000,000 acre-feet which the compact authorizes to be appropriated in the lower basin.

Mr. BRATTON. That is the thought I had in mind, although I did not express it accurately.

If the State of California is willing thus to bind herself, is it the opinion of the Senator from Arizona that that will result in composing the differences among the lower-basin States, and will bring about a 7-State ratification?

Mr. HAYDEN. Certainly. That is exactly what we are trying to do.

Mr. BRATTON. I understand that. The Senator believes that the adoption of this amendment probably will lead to an early ratification by all seven States?

Mr. HAYDEN. I certainly do, or I would not offer it.

Mr. BRATTON. I appreciate that. I should like very much to know if the proposition is entertainable by the State of California.

Mr. JOHNSON. No; the amount is not one that it is possible to accept. I am very glad to use it as a basis for an endeavor to reach some conclusion, to do everything that lies within my power to the end that that conclusion will lead either to the ratification of the 7-State pact or to the passage of this bill; but I did not understand the Senator from Arizona in his speech of yesterday to say that a division of water alone would lead to a composition of the differences which exist. I understood him yesterday to insist not alone upon a division of water, as he suggests now, but, as well, to rest upon a substantial prohibition in this bill of the erection by the United States Government of a generating plant at Boulder Dam. Is not that what was said yesterday by the Senator from Arizona?

Mr. HAYDEN. The Senator from Arizona stated yesterday that there were three essentials to a complete settlement of this controversy: First, the insistence of the States of the upper basin on a 7-State ratification of the Colorado River compact; second, subordinate to that, an apportionment of the waters of the lower basin, as authorized by the compact; and, third, a provision in this bill which will carry out the recommendations made in the President's message with respect to power.

Mr. JOHNSON. But the Senator stated yesterday distinctly what he desired, and that was that only private enterprise could erect a generating plant at the Boulder Dam; and he stated the reason. He said that his State desired to charge a taxable amount for the property thus created by private enterprise. Is not that correct?

Mr. HAYDEN. I interpreted the President's message to mean that the legislation enacted would provide for private development of power at Boulder Dam.

Mr. JOHNSON. Correct.

Mr. HAYDEN. In that event everything that Arizona has ever asked for would be accomplished.

Mr. JOHNSON. All right. Let me say, then, to the Senator from New Mexico, that there are two conditions annexed here: First, Arizona says, "You must divide the water in accordance with what has been suggested." Secondly, "You must forbid the great Government of the United States from erecting, if it desires in the future, a generating plant at Boulder Dam."

Mr. BRATTON. Mr. President, will the Senator from Arizona yield?

The PRESIDING OFFICER. Does the Senator from Arizona further yield to the Senator from New Mexico?

Mr. HAYDEN. I do.

Mr. BRATTON. Let us separate the two things for the moment and discuss only the division of water.

The Senator from Arizona now says that, in his opinion, a restriction to 4,200,000 acre-feet will bring about a ratification of the compact by all seven States, including Arizona. I understand the Senator from California to say that the amount thus designated is not altogether satisfactory.

Mr. JOHNSON. The Senator is quite right. That is correct, sir.

Mr. BRATTON. Is the Senator in position to say what is entertainable?

Mr. JOHNSON. The lowest amount conceivable from the standpoint of the information now at hand with me is 4,600,000, to be put in as an amendment to this bill by the Senator from Wyoming; but what I was calling to the attention of the Senator was this:

Of what avail is it to say, "You ought to make sacrifices of water and water rights that are now perfected"; of what avail is it to say to California, "You must yield that which you practically have to-day, and that is absolutely necessary to the welfare of your people, to have a composition," when the second condition is annexed that "You, too, must say that your Government never shall be permitted to erect a generating plant at the Boulder Dam"?

Mr. BRATTON. But if we pass the bill in the alternative condition in which it now stands that will govern; will it not?

Mr. JOHNSON. But you have not reached a composition between Arizona and California, then. That is the difficulty.

I will say to the Senator from New Mexico that in my opinion I could sit down with him, and possibly with the Senator from Arizona—because our relations are most friendly—and we might reach an agreement as to water. I am not clear as to that; I would be glad to; but I can not, sir, reach an agreement as to water that shall be a composition of the differences existing and pledge myself that the Congress of the United States will enact a law that a generating plant never can be erected by the United States Government.

Mr. BRATTON. Discussing the subject of water separate and apart from all other features of the bill, there seems to be a difference of 400,000 acre-feet between Arizona and California.

Mr. JOHNSON. So there seems.

Mr. BRATTON. Without taking sides either way, we in the upper-basin States desire to adjust the whole matter satisfactorily to all of the States concerned. Any other attitude would be unbecoming a State.

Mr. JOHNSON. I am sure that is the attitude of the gentlemen who confront me here.

Mr. BRATTON. We entertain the friendliest feeling toward each State; but it does seem to me, representing one of the upper-basin States deeply and vitally concerned in the matter, that when we are dealing with 15,000,000 acre-feet, a difference of 400,000 acre-feet should not be permitted to defeat the entire proposal. I think each side could afford with profit to yield something, and not let a controversy respecting that slight volume of water defeat one of the most important measures that Congress has considered during a long time in the past and perhaps one of the most important that it will consider during a long space of time in the future. I want to join with

the Senator from Utah [Mr. KING] in saying that it is the earnest desire of the upper-basin States to aid the lower-basin States in adjusting and composing these differences and passing this legislation in a form that will be reasonably satisfactory to the two States and the other five as well.

Mr. JOHNSON. I am sure that is so.

Mr. BRATTON. I want to urge that this difference of 400,000 acre-feet be not allowed to stand as a barrier to the passage of this legislation. There are no two men in the Senate more willing or disposed to discuss a thing dispassionately and progressively and constructively than the Senator from California and the Senator from Arizona.

Mr. HAYDEN. My purpose this afternoon, Mr. President, is to explain to the Senate, and particularly for the information of the senior Senator from California, who did not attend the Denver conference, where I had the privilege to be present, just how the figures contained in the pending amendment were arrived at. I am hopeful that when he fully understands just what the amendment seeks to accomplish the Senator himself will be convinced that the proposal is meritorious and should have his support.

Mr. JOHNSON. If the Senator will yield, I shall be delighted to have the information; but, before the Senator begins, let me ask him categorically a question. If we can settle the differences in water, will you go forward with this bill, and will you ratify the 7-State pact?

That is a distinct and a definite question.

Mr. HAYDEN. The Senator wants me to agree——

Mr. JOHNSON. No; we will not say "agree," but will you say that that can be done?

Mr. HAYDEN. Let me see if I understand the Senator's question. He asks me, if this proposed lower basin water agreement is adopted, whether then, irrespective of how power may be treated in the bill, the State of Arizona will be satisfied? Is that what he wants to know?

Mr. JOHNSON. I want to know if you will ratify the 7-State compact and pass the bill; yes, sir.

Mr. HAYDEN. I will state to the Senator frankly that the form in which this bill comes from the House of Representatives is not satisfactory to the State of Arizona.

Mr. JOHNSON. All right; let us take the Senate bill. Will you go forward with the Senate bill, and will you ratify the 7-State compact if we divide water, if you and I can agree on the water?

Mr. HAYDEN. What I am trying to do——

Mr. JOHNSON. Oh, that is easily answered. There is no room for any doubt as to what that question means. Suppose you and I sit right down here and we divide the water, and apportion it between Arizona and California, and agree upon the terms. Will you then for Arizona see that the compact is ratified, and go forward with the bill? Or rather, let us say, will Arizona? I do not want to put it in the personal aspect. Will Arizona ratify the compact and go forward with the bill?

Mr. HAYDEN. I can answer the Senator's question very much better when we come to discuss the power issue. I am fully convinced that this bill, in the form in which it now appears, does not carry out the recommendations made in the President's message and that there will be changes in the power provision in order that it may conform to what the President desires in that respect.

Mr. JOHNSON. I think the Senator has answered the question, and I submit the answer to the Senator from New Mexico and the Senator from Utah.

Mr. HAYDEN. I prefer, and I think it is highly desirable, that we talk about one thing at a time. I have noticed——

Mr. JOHNSON. I know the Senator will pardon me for my interjection and interruption. I only indulged in it because of the very kindly remarks that were made by the Senator from Utah and those of the Senator from New Mexico. That is my excuse and my apology for interrupting the Senator from Arizona.

Mr. BRATTON. Mr. President——

The PRESIDING OFFICER. Does the Senator from Arizona yield further?

Mr. HAYDEN. I yield to the Senator from New Mexico.

Mr. BRATTON. I entered the discussion at this point because the Senator from Arizona is discussing an amendment dealing with water.

Mr. HAYDEN. And the Senator will agree with me that if this controversy is to be settled, and settled by amendments to the pending bill, the Senate will have to vote on one amendment at a time.

Mr. BRATTON. Certainly; but the point that I am endeavoring to approach is that if a satisfactory limitation on the water to be used by California can be written into the bill, does the Senator think that that will be conducive to an early ratification by all of the States?

Mr. HAYDEN. There is no question that such will be the result. It will do more than any other thing to bring about a complete ratification of the Colorado River compact, because, as I have stated to the Senator, the State of Arizona has infinitely more concern about a proper apportionment of the water than it has about any income that may be received from power.

Mr. BRATTON. And for that very reason it seems to me that it is highly important that both the State of Arizona and the State of California assume a compromising attitude upon the question of water, and the limitation to be placed upon California respecting its use of water. I think that is the attitude and the sincere desire of all of the upper basin States. I intend to discuss the bill later, in an effort to set forth my position upon it and the interest which the State I represent has in the matter; but for the time being I am content to repeat that I hope the two Senators concerned will make overtures in the direction of compromise.

Mr. KING. Mr. President, will the Senator yield?

Mr. HAYDEN. I yield.

Mr. KING. Perhaps I misunderstood the Senator from California or the Senator from Arizona or both. I did not understand the Senator from Arizona to take the position that in order to secure a ratification of the compact there must be a prohibition in the bill against the Government of the United States erecting a dam at Boulder Canyon or at some other place upon the Colorado River. Nor did I understand the Senator from Arizona to mean that the ratification of the compact could not be effectuated unless there was a prohibition in the bill against the Government erecting a power plant. I understood him to say yesterday in his discussion that Arizona was supporting generally the position of the President of the United States in his message, namely, that the generation of the power and its distribution were properly the functions of private corporations instead of the Government, and that Arizona preferred the views expressed by the President in that regard to the views of those who insisted that the Government of the United States should build a power plant and also make distribution of the power which was generated. But I have understood the Senator from Arizona to mean that the condition precedent to ratification of the compact, and the only condition precedent to that, was that there should be an equitable division of the water, and that that equitable division should be substantially as indicated in the amendment which he has just offered, and that he pretermitted the consideration of the other two questions to the bill itself, and did not insist that those should be determined as a condition precedent to the ratification of the contract.

Mr. HAYDEN. If the Senator will permit me to say so, whether any other Senator has learned anything in the course of the debate or not, I feel sure that I have, as a result of the discussion which has taken place, some of the ideas expressed as to a means of bringing about an adjustment of the power controversy had not entered my mind before, and I have given very careful thought to that situation.

My desire to-day is to discuss the question of differences between the States of Arizona and California with respect to water. That, so far as the State of Arizona is concerned, is the paramount issue. It so overshadows and is so far beyond the question of what revenues may be received from the proposed power development that there can be no comparison between the two matters, important as the power issue may be. It is, and properly so, a secondary matter.

With respect to the ratification of the 7-State compact, as everyone is well aware, the States of the upper basin, New Mexico, Colorado, Wyoming, and Utah, very promptly after the making of that agreement ratified the compact. The lower-basin State of Nevada ratified the compact. Nevada's ratification to-day stands as an unconditional approval of that instrument.

The State of California also approved the compact. Afterwards, however, the State of California withdrew its ratification of that agreement, and to-day does not stand in the position of giving it unqualified approval. California's approval of the compact is conditional upon the construction of a dam at or near Boulder Canyon, having a capacity of at least 20,000,000 acre-feet of water.

The enactment of this bill meets the California condition. The failure to enact this bill leaves the compact unratified by the State of California.

The State of Arizona has never ratified the Colorado River compact. When that instrument was first submitted to the Arizona Legislature it failed of adoption by a majority of one in one house of the legislature and by a tie vote in the other.

I myself, as a Representative in Congress from that State at that time, earnestly urged the Legislature of the State of Arizona to approve that agreement. The gentleman who has been recently elected as Governor of the State of Arizona, John C. Phillips, a candidate on the Republican ticket, who will assume office the first week in next January, was a member of that legislature and voted for the approval of the Colorado River compact. He supported its approval, as I did at that time; but it was not approved.

I want the Senate to understand why it was that Arizona did not approve the compact. The reason was perfectly simple. The Legislature of Arizona, after the most careful consideration, arrived at the conclusion that it was unsafe for the State of Arizona to approve that agreement unless there should be an understanding as to how the waters of the lower basin should be apportioned between the States of Arizona and California. They found on record filings by the State of California which claimed all of the water of the Colorado River.

Mr. JOHNSON. Mr. President, will the Senator yield?

Mr. HAYDEN. I yield.

Mr. JOHNSON. Can the Senator state how much of perfected water rights there are in the State of California to-day from the Colorado?

Mr. HAYDEN. The best way I can answer the Senator from California is to read to him from a proposal made by the commissioners representing the State of California on the 1st day of December, 1925, wherein those commissioners suggested an allocation of water:

> That there is hereby allocated from the waters of the Colorado River in the State of California in present perfected rights, in addition to all other allocations of beneficial consumptive use, 2,146,600 acre-feet of water.

In other words, in the year 1925 the State of California claimed to have perfected a right to the use of 2,146,600 acre-feet of water.

Mr. BRATTON. Mr. President, will the Senator yield?

Mr. HAYDEN. I yield.

Mr. BRATTON. Can the Senator tell us what the present perfected rights in Arizona amount to?

Mr. HAYDEN. I can not; I have not that information at hand.

Mr. JOHNSON. Let me call the attention of Senators to the fact in that connection, too, that the amounts that are now actually appropriated, and that are being applied to use, or are in process of being put to use, in either of which events the appropriation is perfectly good and the water can not be taken away, are 4,508,708 acre-feet.

Mr. HAYDEN. Does the Senator include in that amount an appropriation filed by the city of Los Angeles for water for domestic use?

Mr. JOHNSON. Yes; it is a perfectly good filing and a legal filing. It has its standing to-day.

Mr. HAYDEN. I will say to the Senator very frankly and in the best of spirit that that filing, without the passage of legislation by Congress, without the construction pursuant to that legislation of a dam to impound the water of the Colorado River, will produce no more water for the city of Los Angeles than was contained in the ink used by the person who signed the document in behalf of that city.

Mr. JOHNSON. Let us even concede that——

Mr. HAYDEN. As a practical matter, the filing is utterly worthless unless the Congress of the United States appropriates money to build the Boulder Dam.

Mr. BRATTON. How much is involved in that filing?

Mr. JOHNSON. One million and ninety-five thousand acre-feet.

Mr. BRATTON. How far has that filing progressed?

Mr. JOHNSON. It has progressed to the extent that every legal formality has been complied with and over $1,000,000 have been expended already by the city of Los Angeles in respect to it.

In addition to that, I want to make clear—although I ought not to interrupt the Senator from Arizona, and I will conclude with just this statement—in addition to that there are rights to which appropriation rights have not yet attached, but which, under the known feasibility, with the all-American canal, will be equal to not less than 338,800 acre-feet, making a total of 5,264,300 acre-feet. I am giving these figures because I am going to compare them ultimately, and ask the Senator from Arizona to compare them, first, with the number of acre-feet which thus far have been appropriated by Arizona and the number possible to be used by Arizona under the construction that is contemplated by this bill; and I want those figures to be borne in mind by Senators when they consider water and water rights.

Mr. WALSH of Montana. Mr. President, will the Senator yield?

Mr. HAYDEN. I yield.

Mr. WALSH of Montana. I would like to inquire of the Senator from California what is the character of the diversion contemplated in the Los Angeles appropriation?

Mr. JOHNSON. The character is a pumping from the river over 1,400 feet of hills into an aqueduct.

Mr. WALSH of Montana. Does it contemplate any dam or any storage at all?

Mr. JOHNSON. No; not that I am aware of. I think no dam is contemplated there.

Mr. WALSH of Montana. Is any such amount of water available from the natural flow of water without storage?

Mr. JOHNSON. I do not think that amount of water is available at all at the present moment.

Mr. WALSH of Montana. I would think that the appropriation, to be of any value, must contemplate works making it feasible.

Mr. JOHNSON. Those works thus far have been commenced in the expenditure of a million dollars in surveys and the like, and somebody sometime—the city of Los Angeles or the Government or somebody—will unquestionably construct a dam.

Mr. WALSH of Montana. That is what I wanted to know. The dam would be constructed somewhere in the State of Nevada or Arizona?

Mr. JOHNSON. I presume that is likely, although this diversion is from Arizona.

Mr. WALSH of Montana. Would the city of Los Angeles be authorized, without specific authority from Congress, to throw a dam across the Colorado River in Arizona?

Mr. JOHNSON. I think not. My offhand "shotgun" opinion would be no.

Mr. WALSH of Montana. Then, it seems to me there is some question about it.

Mr. JOHNSON. There is one aspect in which it might be done, and that is by the Federal Power Commission. It strikes me that under the Federal water power act the privilege could be accorded to the city of Los Angeles to erect a dam.

Mr. WALSH of Montana. Would not the appropriation be nugatory in the absence of that authority in view of the existing statute under which the water power commission is without power?

Mr. JOHNSON. I would change the adjective. I would not say "nugatory." I would say "futile."

Mr. WALSH of Montana. Suspended?

Mr. JOHNSON. Suspended is a better word still.

Mr. KING. Mr. President, will the Senator from Arizona suffer an interruption?

Mr. HAYDEN. I yield to the Senator from Utah.

Mr. KING. As I understood the Senator in reading from the document a few moments ago, it showed that there is a claim of 2,000,000 acre-feet plus of perpetual water right in California.

Mr. HAYDEN. That is right.

Mr. KING. I would like to know if the document states just what was done to perfect those rights and whether there was any water used under those rights other than in the Imperial Valley?

Mr. HAYDEN. I have here a proposal made in 1925 by the commissioners appointed by the State of California to the State of Arizona for an apportionment of the water of the lower basin. The best way to answer the Senator from Utah is to read just what the proposal says:

> ART. 3. The States of California and Nevada hereby release to the State of Arizona any and all claims of every kind and nature to the use of the waters of the Gila River, the Williams River, and the Little Colorado River and all of their respective tributaries for agricultural and domestic use, and the States of Arizona and California hereby release to the State of Nevada any and all claims of every kind or nature to the use of the waters of the Virgin River and all of its tributaries for agricultural and domestic use, in consideration of which there is hereby allocated from the waters of the Colorado River to the State of California 1,095,000 acre-feet of water per annum in perpetuity for beneficial constructive use.

It will be observed that at that time the State of California asked the States of Arizona and Nevada to allocate for the use of that State 1,095,000 feet of water upon condition that California would waive any claim that it might have to the waters of the tributaries of the Colorado River in Arizona and Nevada. At that time apparently the State of California had not made any filing, had not posted a notice on a stone or post somewhere near the Colorado River, had not filed a document in some public office, asserting an appropriation of water for domestic use by the municipalities of southern California.

I take it from the similarity of the figures, 1,095,000 acre-feet, that they represent an equal quantity of water desired by the cities of southern California, as was just expressed by the Senator from California. At that time California was seeking to obtain water for domestic purposes; and it was indeed very kind and very generous of the California commissioners to say that they would waive any and all claims to the waters of the tributaries of the Colorado River in Arizona and Nevada in consideration of California being allowed to have that amount of water. They were willing to give Arizona and Nevada what the two States already possessed in order to obtain the use of 1,095,000 acre-feet of the water for domestic purposes.

Mr. WALSH of Montana. Mr. President, if the Senator will pardon me, I would like to pursue a little further the colloquy I had with the Senator from California.

Mr. HAYDEN. I yield to the Senator from Montana for that purpose.

Mr. WALSH of Montana. If the city of Los Angeles has this enormous appropriation of the waters of the Colorado River, a perfected appropriation of an inchoate appropriation, does it follow, if the Government erects this dam across the Colorado River and creates a great storage basin, that it must yield up that amount of water to the city of Los Angeles?

Mr. JOHNSON. I rather think so, just exactly as if it were a perfected right for irrigation purposes.

Mr. WALSH of Montana. Yes; but I always understood that the interest that stores the water has a right superior to prior appropriations that do not store.

Mr. JOHNSON. Possibly so. What is the point?

Mr. WALSH of Montana. The point is that apparently, if that is correct, then this expenditure is being made with no right in the Government of the United States to control the water which is stored, but that it must go to those appropriators.

Mr. JOHNSON. No; the bill provides that a contract in advance must be made for the storage of water by the Secretary of the Interior.

Mr. WALSH of Montana. A contract with whom?

Mr. JOHNSON. With those who utilize and take and appropriate the water.

Mr. WALSH of Montana. That is to say, the Government may dispose of the stored water as it sees fit?

Mr. JOHNSON. Yes; under the terms of this bill.

Mr. WALSH of Montana. Then how can it be said that the city of Los Angeles has a perfected interest?

Mr. JOHNSON. It has a perfected right there unquestionably, but the bill requires the city of Los Angeles to conform to it, and the city of Los Angeles is perfectly willing to conform to it just exactly as if it had no perfected right.

Mr. WALSH of Montana. Am I correct in the assumption that the Government of the United States must distribute the water to the various appropriators in accordance with their several appropriations?

Mr. JOHNSON. If they contract.

Mr. WALSH of Montana. Yes; but to contract means a liberty of contract. That is what I want to know. Can the Secretary give the water to them or withhold it from them as he sees fit?

Mr. JOHNSON. Certainly, because before he begins work upon the dam he has to have the contract in his possession for its payment, and he is the one who is to fix the sums that are to be paid.

Mr. WALSH of Montana. Yes, but that is quite contradictory. It seems to me that the city of Los Angeles has no rights by virtue of this appropriation.

Mr. JOHNSON. Certainly it has, but those rights unquestionably will be controlled by this bill.

Mr. WALSH of Montana. I should like to have a very much clearer understanding about that than I have.

Mr. JOHNSON. I fear I can not make it any clearer to the Senator. I would like to do so if I were able.

Mr. WALSH of Montana. Let me inquire of the Senator, then, of what value to the city of Los Angeles is this appropriation? It goes to the Secretary of the Interior and wants to make a contract with the Secretary of the Interior to furnish water pursuant to its appropriation. The Secretary of the Interior says, "I do not accept your terms at all. I will not contract with you upon that basis." Some one else comes along who offers to make a contract with the Secretary of the Interior for the water, that is satisfactory to him and to them. Where, then, does the city of Los Angeles come out?

Mr. JOHNSON. I doubt very much if the Secretary, under the circumstances, would make such a contract.

Mr. WALSH of Montana. Then he is obliged to contract with the city of Los Angeles?

Mr. JOHNSON. No; he is not obliged to do so, but he is obliged to contract with somebody that makes the same claims to the same waters, and unless the contract is by mutuality agreed upon then he will not build the dam. That is the condition precedent to the construction of the dam.

Mr. WALSH of Montana. Then he is at liberty to contract with the city of Los Angeles, which has an appropriation, or with some one else that has not an appropriation?

Mr. JOHNSON. Yes; he is at liberty to contract with the city of Los Angeles, which has an appropriation.

Mr. WALSH of Montana. But can he disregard the city of Los Angeles?

Mr. JOHNSON. I doubt very much if he can.

Mr. WALSH of Montana. And contract with some one else who has no appropriation?

Mr. JOHNSON. I doubt very much, first, if he would, and I doubt, secondly, if he could.

Mr. HAYDEN. Mr. President, if the Senator from Montana will permit me, I want to assure him that so far as these paper appropriations of water are concerned there are just as many of them on the Arizona side of the river as there are on the California side.

Mr. WALSH of Montana. I rather assumed so.

Mr. HAYDEN. I am quite sure one paper appropriation of water is just as valuable as another. I do know that the Arizona High Line Canal Association has filed an application for all of the water of the Colorado River in due and legal form in the State of Arizona. If that is of real and substantial value, then Arizona has good title to all the water in the Colorado River.

Mr. WALSH of Montana. I directed the inquiry merely for the purpose of trying to find out, if I can, under what kind of obligation the Government of the United States, should it build this dam, would be to those who have the appropriations.

Mr. JOHNSON. The Government would be under no obligations until it makes its terms. I seem unable to make that plain. But here is everything in this scheme, plan, or design: Everything is dependent upon the Secretary of the Interior contracting with those who desire to obtain the benefit of the construction, and he is not to undertake any expenditure nor to undertake any construction until that shall have been accomplished.

Mr. WALSH of Montana. Let us suppose the Arizona people are perfectly willing to meet the requirements and that the Los Angeles people are perfectly willing to meet the requirements, and other people who have not even attempted to make any appropriation are perfectly able and willing to meet the requirements. Who then has the right?

Mr. JOHNSON. The Secretary of the Interior and the Government have the right.

Mr. WALSH of Montana. The Secretary of the Interior may utterly ignore those appropriations?

Mr. JOHNSON. Possibly so.

Mr. WALSH of Montana. That is what I am curious to find out about.

Mr. KING. Mr. President, will the Senator yield?

Mr. HAYDEN. I yield.

Mr. KING. It occurs to me that the Secretary of the Interior would be derelict in his duty, if this bill were to become a law, if he should spend one penny in the construction of a dam until he had determined the different rights existing either in California or in Arizona with respect to the waters of the river. If there are suspended or inchoate rights in either of those States which might not ripen into perfected rights through a contract or recognition of the same, and there is sufficient water to meet all of those suspended or inchoate or perfected rights, it will be the duty of the Secretary of the Interior, if he were fully to discharge his duty, to obtain from those claimants a waiver of their rights, inchoate or perfected. If not, when the dam was constructed and the water impounded the Government of the United States might have a dozen law suits; persons who had made filings might insist that the water impounded was theirs; that they had been interfered with by a superior physical power, to wit, the Government of the United States, and that they had been prevented from completing rights which they had initiated either under State laws or by reason of acts of Congress. It is obvious that there are claims here for a vast amount more water than flows in the Colorado River.

Mr. HAYDEN. Mr. President, if the Senator will permit me, I should like to say that that is not an unusual situation. On every stream throughout the entire western part of the United States where irrigation is practiced appropriations have been filed for many times more water than flows in the streams. There is nothing to prevent any qualified citizen of the United States or any corporation organized under the laws of any State from posting a notice, upon a rock, or tack-

ing it to a monument on the bank of the river or going to some county recorder's office and making a filing, claiming a vast quantity of water out of the stream. That condition exists everywhere and it does not alarm anyone. Appropriations of that kind have been made in California, and have been made in Arizona, and none of them are of any value whatsoever so far as the future is concerned until the Government of the United States spends some sixty or seventy million dollars to build a dam and impound the waters of the Colorado River and make the same actually available for diversion and use.

Mr. KING. Mr. President, if the Senator will pardon me, I think that the last statement made by him is a little too broad. The Senator in the plenitude of his experience in the Western States knows that sometimes a right is initiated by the weaker party, if I may use that expression, and a superior party, sometimes by physical force, comes in and builds a dam sooner than the other man. I have known them to be driven from the construction by guns. It is obvious that the man who has been driven off or been prevented from completing his rights would have some standing in a court of equity if he were to attack the rights or the claimed rights of the superior party who had perhaps control of the dam and had taken the water out of the stream.

It seems to me that the statement made by the Senator should admonish us that if this bill is to be passed there should be a provision in it that there shall be no work done under the law until the conflicting rights, if there be any, shall be determined, and, if necessary, that a bill in equity be filed against all persons who claim water in the stream, in order that the rights may be adjudicated and waivers obtained.

Mr. HAYDEN. Let me say to the Senator from Utah that I do not concede that any such provision is at all necessary. The only thing required in this bill is contained in the amendment that I have offered, that there shall be apportioned to each State its share of the water. Then, who shall obtain that water in relative order of priority may be determined by the State courts.

Mr. KING. If the Senator means by his statement that the Federal Government may go into a stream, whether it be the Colorado River, the Sacramento River, or a river in the State of Montana, and put its powerful hands down upon the stream and say, "This is mine; I can build a dam there and allocate water to whom I please, regardless of other rights, either suspended, inchoate, or perfected," I deny the position which the Senator takes.

Mr. HAYDEN. The amendment that I have offered contemplates no such possibility.

Mr. WALSH of Montana. Mr. President, let me remark——

Mr. PHIPPS. Mr. President, will the Senator from Arizona yield to me?

The PRESIDING OFFICER. Does the Senator from Arizona yield; and if so, to whom?

Mr. HAYDEN. I yield first to the Senator from Montana.

Mr. WALSH of Montana. Let me remark in that connection that if, as contended apparently by the Senator from California, the city of Los Angeles has a right, inchoate in character, in process of perfection, which entitles it to a certain amount of water out of the Colorado River, if we allocate so much of the water to the State of Arizona as interfers with its rights, would not we be taking property from the people of Los Angeles without due process of law?

Mr. HAYDEN. If the right were of a character that must be recognized, I would agree with the Senator.

Mr. WALSH of Montana. That, I understand, is the contention of the Senator from California, that the hands of the Government are tied; that if we shall erect a dam there at all we shall have to give enough water out of that dam to the city of Los Angeles to satisfy its appropriation.

Mr. HAYDEN. But I am quite sure, if I understood correctly the Senator from California, that he qualified that statement by saying that, after all, the Secretary of the Interior could allow the city of Los Angeles to have such quantity of water as might be determined by contract.

Mr. PHIPPS. Mr. President——

The PRESIDING OFFICER. Does the Senator from Arizona yield to the Senator from Colorado?

Mr. HAYDEN. I yield to the Senator from Colorado.

Mr. PHIPPS. It seems to me that in resolving such a difficulty, should it arise, there would be taken into consideration the fact that water for domestic use should take priority over water intended for purposes of irrigation. Aside from that, these filings are first in point as compared with those to which the Senator from Arizona referred. They are for a superior use, and, in addition thereto, the applicant who has made the filing has pursued the proper course in developing the manner of appropriation or the manner of diverting the water and putting it to the highest beneficial use. I do not anticipate any difficulty on that score in resolving the question of priority by the Secretary of the Interior.

Mr. HAYDEN. So far as the other States of the Colorado River Basin are concerned, whatever use is made of the water by the State of California within the limits allowed to that State by interstate agreement they have no concern whatever. The other States are not interested as to whether it is used for one purpose or another. The Colorado River compact itself recognizes that domestic use is the highest use. Congress will approve the Colorado River compact if this bill is passed. Therefore the Secretary of the Interior will naturally decide as between applicants, one who desires to use the water for potable purposes in the city and another who desires to use it for irrigation, if there is not enough water to go around, that the city shall have the preference.

Mr. PHIPPS. It seems to me that the division of the available water between the States through mutual understanding and agreement will settle this question, and there will be no difficulty in allotting it to the various applicants who may desire to use it.

Mr. KING. Mr. President, if I understood the Senator from Colorado correctly, I think that he stated a proposition of law that is not defensible, namely, that because the statute may state that domestic uses are superior to power or irrigation uses that would enable an appropriator who sought the water for domestic use to take it away from the person who was using it for irrigation or for power purposes. It is possible that he might obtain the water, but only through the exercise of the power of eminent domain, and he would have to pay the irrigator or the power company that had a right just compensation for the property of which it or he had been deprived. The superior right merely gives the person who seeks it for the superior purpose—for instance, for domestic use—the right of condemnation against an inferior right, but he can not take it away without paying compensation.

Mr. PHIPPS. That is true. We were discussing the question of the disposition of waters that had not as yet been allotted to applicants who filed for their use.

Mr. BRATTON. Mr. President——

Mr. HAYDEN. I yield to the Senator from New Mexico.

Mr. BRATTON. This discussion as an academic one is very interesting, but for practical purposes I doubt if it has much relevancy, because I think, beyond a doubt, there is enough water in the Colorado River to satisfy all vested rights of merit and substance, and, consequently, we may proceed on that assumption.

Mr. HAYDEN. I thoroughly agree with the Senator; but the fact that the Colorado River has at least on four occasions been absolutely drained dry in order to supply water to the Imperial irrigation district is notice to anyone that whatever water rights which may now exist are limited. It is a fact that there have been great losses to farmers in the Imperial Valley on more than one occasion by reason of the fact that the quantity of water obtainable from the stream in periods of low water was not sufficient to satisfy their needs. Therefore the present existing or perfected rights are not such but that they would be greatly benefited by the erection of a dam, as proposed by this bill, and the storage of water therein which would be available to them upon demand.

Now, if I may be permitted, I should like to conclude the reading of the offer made by the State of California and the State of Arizona on December 1, 1925, with respect to an apportionment of the waters of the Colorado River in the lower basin.

Paragraph (d) of the proposal is that—

> There is hereby allocated from the waters of the Colorado River to the State of California its present perfected rights, in addition to all other allocations, the beneficial consumptive use of 2,146,600 acre-feet of water per annum in perpetuity.

In other words, on the 1st day of December, 1925, the State of California, through its duly accredited and appointed commissioners, claimed to have a perfected right to 2,146,600 acre-feet of water:

> (e) The use of waters of the Colorado River not otherwise hereinabove expressly allocated, is hereby allocated in equal shares to the States of Arizona and California, it being the intention of the signatory States, subject to the terms of the Colorado River compact, to divide for use in said States all of the waters of the Colorado River, provided, that any water allocated by this paragraph (e), but not actually applied to agricultural or domestic use by January 1, 1975, shall thereafter, notwithstanding the foregoing allocation, be subject to appropriation for use in either Arizona or California.

ARTICLE IV

It is the intention of the signatory States to so divide the waters of the Colorado River as to provide for the maximum use thereof within said States, and notwithstanding the foregoing allocations no State shall withhold water and no State shall require the delivery of water which can not reasonably and beneficially be applied to agricultural or domestic use within said State.

That was the proposal made by the State of California in December, 1925. When the governors of the four upper basin States called the Denver conference, the same proposal, in substance and effect, was again made by the State of California.

Mr. McKELLAR. Mr. President, may I ask the Senator from Arizona a question? I just want to see if I understand the differences between the Senator from Arizona and the Senator from California in reference to this bill.

First, as I understand the Senator, there is a difference of 400,000 acre-feet of water. California claims that much more than the Senator, representing Arizona, is willing to give. Is that correct?

Mr. HAYDEN. It might well be stated in that way.

Mr. McKELLAR. It might be stated in that way—400,000 feet out of 7,500,000 feet?

Mr. HAYDEN. Yes.

Mr. McKELLAR. Under those circumstances, it seems to me that the Senators from Arizona and California surely ought to adjust that difference. If it is only 400,000 acre-feet out of 7,500,000 acre-feet, there ought not to be any real difference on that score.

The next difficulty, as I understand, is that the State of Arizona claims that if this dam is built and afterwards transferred to private owners by lease, the State of Arizona then ought to have the right to tax that property in the hands of private owners. Is that the contention of the Senator, or do I misunderstand him?

Mr. HAYDEN. The contention that has been made many times by commissioners representing the State of Arizona is, briefly, this: That if a dam and a power plant were built by private enterprise on the Colorado River, the property and the values thus created would be taxable within the States of Arizona and Nevada, as in this instance. While the people of Arizona have no objection to the Federal Government building a dam and a power plant and engaging in the power business if Congress so desires, they do object to the use of the fact that the dam and other structures are Federal property as an excuse for being deprived of a revenue that they otherwise would receive if the development took place by private enterprise.

Mr. McKELLAR. Would the Senator be willing to accept an amendment that provides that if, after the plant is actually built, it is then leased to private interests, the two States mentioned, Nevada and Arizona, would have the right to tax that property in the hands of private operators?

Mr. HAYDEN. That might be a way of accomplishing the desired result.

Mr. McKELLAR. If the Government builds that plant and operates it, I think perhaps it ought to have the right to operate it without compensation in the way of taxes to the two States; or it might be that it would be better to permit those States to have some stipend in lieu of taxation. That however, is only in the event that the Government operates it. If the Government, after it builds the plant, turns it over into private hands, it seems to me that the States of Arizona and Nevada, within certain prescribed lines set up in the bill, should have the right to tax the property in private hands.

Mr. HAYDEN. I am interested in the suggestion made by the Senator; but I really prefer, if I may, at this time to confine the discussion to the question of an apportionment of the waters of the Colorado River. The power question must be considered separately.

Mr. McKELLAR. What I wanted to know was whether those were the two differences between the Senator from Arizona and the Senator from California.

Mr. HAYDEN. Yes.

Mr. McKELLAR. And they are the questions to be determined in this matter. Otherwise the bill is satisfactory to the Senator from Arizona?

Mr. HAYDEN. There are no other differences between the Senators from California and the Senators from Arizona that can not be very readily adjusted and compromised if the basic questions are first determined.

At the time this offer of the State of California was made in 1925 to the State of Arizona a counterproposal was submitted by the State of Arizona which represents the view of that State as again presented at the Denver conference.

The best way to illustrate to the Senate just what Arizona's position is, and has been from the very beginning, with respect to an apportionment of water in the lower basin, is to read this section from the counterproposal submitted by the State of Arizona to the State of California on December 14, 1925.

Arizona proposed:

The States of Arizona, California, and Nevada hereby agree that the waters of the Colorado River and its tributaries in said States shall be divided, allotted, and appropriated as follows:

(a) All of the waters of the tributaries of the Colorado River which flow into said river below Lee Ferry, Ariz., are hereby allotted and appropriated exclusively in perpetuity to the States in which such tributaries are located, and may be stored in and diverted from said tributaries or the main channel of the Colorado River for use in said States.

(b) There is hereby allotted and appropriated to the State of Nevada for use in said State that portion of the total amount of water of the main Colorado River as measured at Lee Ferry, which can be beneficially used for agricultural and domestic purposes, not exceeding 300,000 acre-feet per annum.

In other words, from the very beginning Arizona has conceded to Nevada her demand for 300,000 acre-feet of water.

Mr. BRATTON. Mr. President, may I ask the Senator from what he is now reading?

Mr. HAYDEN. I first read a proposal for a settlement of the water controversy in the lower basin made by the State of California, and I am now reading from a counterproposal made by the State of Arizona; both were made in the year 1925.

Mr. BRATTON. I thank the Senator.

Mr. HAYDEN (reading):

There is hereby allotted and appropriated for agricultural and domestic use to each of the States of Arizona and California from the remainder of water available, as measured at Lee Ferry, one-half of the waters of the Colorado River.

I direct the attention of the Senate particularly to the fact that at no time and on no occasion has the State of Arizona ever asked for more than one-half of the water of the Colorado River, in the main stream which comes down from the upper-basin States.

Mr. JOHNSON. Mr. President——

The PRESIDING OFFICER (Mr. ODDIE in the chair). Does the Senator from Arizona yield to the Senator from California?

Mr. HAYDEN. I do.

Mr. JOHNSON. May I ask the Senator a question at this point, or would he prefer to have me wait?

Mr. HAYDEN. I shall be glad to have the Senator ask it now.

Mr. JOHNSON. Will you state what water you take from the tributaries of the Colorado?

Mr. HAYDEN. I can not state the amount accurately.

Mr. JOHNSON. Can you state substantially the amount?

Mr. HAYDEN. Perhaps 2,000,000 acre-feet of water are now in use in the State of Arizona—that is, water that falls upon the soil of that State, and is used wholly within the State, and never escapes from the State.

Mr. JOHNSON. Have you not claimed at times as high as 6,000,000 acre-feet?

Mr. HAYDEN. It may be; I am not able to advise the Senator. When I said "2,000,000 acre-feet" I had in mind the fact that approximately a million acre-feet are used under the Salt River project, and I imagined that about twice as much were used elsewhere throughout the State.

Mr. JOHNSON. So that the RECORD may show it, the Gila River comes into the Colorado about how far above the line?

Mr. HAYDEN. Above the international boundary line?

Mr. JOHNSON. No; above the line between Arizona and California?

Mr. HAYDEN. The Gila enters the Colorado where it forms the boundary line between the States of Arizona and California.

Mr. JOHNSON. All of the water of the Gila you claim?

Mr. HAYDEN. We ask for all of the waters of the Gila and its tributaries within the State of Arizona.

Mr. JOHNSON. And in every proposition that you have made, and every proposition that has been considered, from 2,000,000 to 6,000,000 acre-feet from the tributaries of the Colorado River have been reserved by Arizona, have they not?

Mr. HAYDEN. And in the original proposition submitted to the State of Arizona in 1925 that reservation was conceded by the State of California.

Mr. JOHNSON. Conceded on the agreement or the understanding that California should have a certain amount of water.

Mr. HAYDEN. Upon the sole condition that California should have 1,095,000 acre-feet for domestic use.

Mr. JOHNSON. I understand; it has been in the propositions; but California proposed that those waters should belong

to Arizona, provided California had a specific amount of water, which Arizona was unwilling to accord.

Mr. HAYDEN. No agreement was reached.

Mr. JOHNSON. That is true.

Mr. HAYDEN. But I shall demonstrate to the Senator very clearly, I think, before we get through, that if California were allowed the total amount claimed in 1925 by that State as a vested right, and if there were added to that the 1,095,000 acre-feet of water which the State then asked as a condition of the surrender to Arizona of her tributary waters, the total of those two sums is still much less than 4,600,000 acre-feet of water.

Mr. JOHNSON. All right. Now, to what you suggest Arizona should have, if you added her tributaries, how much would Arizona have?

Mr. HAYDEN. We have always felt in Arizona, Mr. President, and I think justly so——

Mr. JOHNSON. I am not going to question that for the moment; but, adding it, how much would Arizona have?

Mr. HAYDEN. I really can not tell the Senator, because I have at hand no accurate figures on the total quantity of water in the Arizona tributaries.

Since that subject has been mentioned, let me say to the Senate that in the case of a river—for example, the Gila River—wholly within the State of Arizona, whose waters are used in the very heart of the State, if those waters were released from a reservoir when needed at a time of drought they must flow down a wide, sandy river bed for some 200 miles before they could reach any other State. It is perfectly obvious that under those conditions the water never would arrive. It would simply be lost by evaporation. Therefore we say that the physical situation is such that it is utterly impossible for any water out of the Gila River or its tributaries to be delivered to any other State or to Mexico during a time of drought, when water is needed; and that is the only time when Arizona would be called upon for a delivery of water. Therefore the physical facts are such that it is utterly impossible, even though some State had a right to acquire the use of water from that stream, for any other State to obtain any of the water. Therefore no State other than Arizona has any interest in the waters of the Gila River. That would be equally true of a tributary such as the Bill Williams, which in time of drought goes down to a mere trickle; or of the Little Colorado River, a tributary in northern Arizona which likewise goes dry in places during a period of drought. There is no water in the tributaries of the Colorado River in the State of Arizona that could be of any possible benefit to any other State in time of drought. If reservoirs existed on these tributaries, and any other State had a right to come into the State of Arizona and insist that the reservoir be opened and the water turned down its natural course to flow into some other State, not a drop of water would arrive during the dry period. Therefore we have felt, naturally, that no other State had any interest in those tributary streams, and particularly so in the case of the Gila River, which empties into the Colorado River below the Laguna Dam.

Under the terms of this bill under the plan of the United States Reclamation Service the last and lowest point on the Colorado River where any water will be diverted from that stream is at Laguna Dam, and Laguna Dam is some 10 or 12 miles above the mouth of the Gila River.

It is true that at the present moment water is diverted from the Colorado River into the State of California just a short distance above the international boundary line at what is known as Hanlon Heading. It is possible for waters which come down the Gila River in time of flood to flow from that stream into the Colorado and then a short distance down the Colorado and into Hanlon Heading and over into Imperial Valley. But the diversion at Hanlon Heading, which is in existence at the present moment, is to be superseded by a transfer of the heading up the stream to Laguna Dam. The Imperial irrigation district is under contract with the Secretary of the Interior to move its heading to Laguna Dam and is now paying annually on that contract. The privilege that they can have of diverting water at Hanlon Heading is only temporary. There is in existence a restraining order of the courts to prevent a diversion there, and each year the court requires the posting of a bond that if any damage results to the United States reclamation project at Yuma by reason of the placing of a weir to divert water from the Colorado River into Hanlon Heading the United States will be made safe from all such damage. Everyone knows that under the terms of the Swing-Johnson bill California never can obtain a drop of water out of the Gila River.

Mr. KING. Mr. President, will the Senator permit an inquiry?

Mr. HAYDEN. Certainly.

Mr. KING. Have the owners of the waters in Imperial Valley, or the irrigation district, at any time ever claimed the Gila River or any part of its waters as necessary for the irrigation of Imperial Valley, or as a proper tributary to their stream?

Mr. HAYDEN. Whether they have claimed it or not, there is no question but that they have used the waters of the Gila River when that stream happened to be flowing into the Colorado. But, as I stated to the Senator a moment ago, there are long periods in almost every year when, for more than a hundred miles from its mouth, the Gila River is absolutely dry. The Gila River, in truth and in fact, has been more of a menace to the Imperial Valley than a benefit. The people of the Imperial Valley would much prefer to move their point of diversion up the stream to Laguna Dam, and then obtain water from the Boulder Canyon Reservoir, than to depend upon any rights they may have to the waters of the Gila River, because the supply is so unstable as to be practically valueless to them.

Mr. KING. I have understood from the records, and from my observation, that the Gila River is what some denominate as a "flash" stream; that when they amounted to anything, and might be of any value for irrigation purposes in the Imperial Valley, the waters in the Gila came down at a time when there was ample water flowing down the Colorado River from above to answer all the demands of the Imperial Valley, and therefore the Imperial Valley had never used the waters of the Gila River.

I do not mean by that to say that the waters of the Gila River did not commingle with the waters of the Colorado River, and at a time when there was water being taken out of the Colorado River at that point for the Imperial Valley, but my understanding is that whenever there was water flowing from the Gila River into the Colorado River, at that time there was more than sufficient water flowing down the Colorado River to answer all of the demands of the Imperial Valley.

Mr. HAYDEN. The flow of the Gila is so spasmodic and so irregular that no rule can be laid down as to when a flood may be expected. A study of the records will show that during some months each year the river has been dry, and in other years during some months water has flowed from the Gila River into the Colorado. But, in truth and fact, from the best information I have from residents of the Imperial Valley, they have not depended upon the Gila River for any part of their water supply. When the Gila River is in flood it carries large quantities of silt, and they would much prefer, for that reason, if for no other, to move the point of diversion up the Colorado River to Laguna Dam.

To continue the reading of the Arizona counterproposal:

> There is hereby allotted and appropriated for agricultural and domestic use to each of the States of Arizona and California from the remainder of the water available, as measured at Lees Ferry, one-half of the waters of the Colorado River.
>
> (c) Any diminution of the amount of water allotted to each State between the point of measurement and the point of delivery caused by evaporation and seepage in storage or in transit shall be borne by each State from its original allotment.
>
> (d) The States of Arizona, California, and Nevada hereby agree to limit and control future appropriations and beneficial use of water in said respective States to such an amount and in such manner as will insure that present perfected rights in each said State will be fully protected and supplied out of waters hereby allotted to said State.

These two documents express the demands of Arizona and California, made prior to the Denver conference. When the Denver conference was held, the governors of the four upper-basin States asked each State to indicate just how much water they wanted out of the Colorado River. The State of Nevada again asked for 300,000 acre-feet out of the seven and a half million acre-feet apportioned in perpetuity to the lower basin.

The State of Arizona again agreed that Nevada should have that quantity of water, and asked for one-half of the water in the Colorado River.

The State of California submitted a demand for 4,600,000 acre-feet of water. How they arrived at that figure I do not know. It may have been based, first, upon present perfected rights, as they asserted, of 2,146,600 acre-feet, plus 1,095,000 acre-feet desired by the municipalities of southern California. But those two figures do not equal 4,600,000 acre-feet of water. Adding the amount of water asserted by California on December 1, 1925, to be a perfected right which is 2,146,000 acre-feet, to 1,095,000 acre-feet, which they did not at that time assert to be such a right, but as a mere desire on the part of the municipalities of southern California to obtain that amount, the two combined amount to 3,241,000 acre-feet. But in Denver, California asked for 4,600,000 acre-feet of water.

The governors of the four upper-basin States, having carefully considered the proposals made by the three States of the lower basin, made the following finding:

The governors of the States of the upper division of the Colorado River system suggest the following as a fair apportionment of water between the States of the lower division, subject and subordinate to the provisions of the Colorado River compact:

1. Of the average annual delivery of water to be provided by the States of the upper division at Lees Ferry under the terms of the Colorado River compact:

(a) To the State of Nevada, 300,000 acre-feet.

(b) To the State of Arizona, 3,000,000 acre-feet.

(c) To the State of California, 4,200,000 acre-feet.

The governors have not explained in any printed document, so far as I know, how they arrived at this compromise. I was told that it was based upon the following facts: They endeavored, by questioning the California representatives at that conference, to ascertain not only what California claimed but the quantity of water to which California had actually perfected rights to use, based upon the normal flow of the Colorado River, unregulated by any reservoir; and they determined that amount.

They also endeavored to determine how much water was being actually used in the State of Arizona, or how much water the State of Arizona had acquired a perfected right to use, and from the total quantity ascertained to be the amount that California had a right to use; they subtracted the amount that Arizona now has a similar right to use and found the difference to be 600,000 acre-feet of water. So the governors said: "Perfected rights must be respected. California has a larger perfected right to the use of water than Arizona. Therefore we will deduct from the demand of Arizona for one-half of the total quantity of the water of the stream, 600,000 acre-feet."

Subtracting 300,000 acre-feet for Nevada from seven and one-half million acre-feet, and then dividing the remainder, would give to Arizona 3,600,000 acre-feet and to California 3,600,000 acre-feet. The governors, after careful consideration, recommended that from Arizona's demand of half the water, or 3,600,000 acre-feet, there be subtracted 600,000 acre-feet, leaving 3,000,000 acre-feet for the State of Arizona. They added to the other half of the water 600,000 acre-feet, increasing California's proportion of the water from 3,600,000 to 4,200,000 acre-feet. That was the recommendation of the governors.

The State of Arizona, through its legally appointed commissioners, consisting of the governor of the State, five members of the legislature of the State, and two other citizens of the State, by a formal vote, accepted the recommendation of the governors of the upper-basin States, and agreed to accept, out of the main Colorado River, 3,000,000 acre-feet.

Mr. JOHNSON. Is the Senator certain there was no condition attached to that?

Mr. HAYDEN. I can read the last expression made by the Arizona-Colorado River Commission.

Mr. JOHNSON. I am just asking the Senator; is he certain there was no condition attached to it?

Mr. HAYDEN. There were conditions, yes; but nothing of grave importance. I shall very shortly read the last statement on the subject of water as made by the Arizona commissioners.

The governors at Denver went on further and stated, in addition:

2. To Arizona, in addition to water apportioned in subdivision (b), 1,000,000 acre-feet of water to be supplied from the tributaries of the Colorado River flowing in said State, and to be diverted from said tributaries before the same empty into the main stream. Said 1,000,000 acre-feet shall not be subject to diminution by reason of any treaty with the United States of Mexico, except in such proportion as the said 1,000,000 acre-feet shall bear to the entire apportionment in (1) and (2) of 8,500,000 acre-feet.

3. As to all water of the tributaries of the Colorado River emptying into the river below Lees Ferry not apportioned in paragraph (2) each of the States of the lower basin shall have the exclusive beneficial consumptive use of such tributaries within its boundaries before the same empty into the main stream, provided, the apportionment of the waters of such tributaries situated in more than one State shall be left to adjudication or apportionment between said States in such manner as may be determined upon by the States affected thereby.

That last provision referred particularly to the Virgin River, which was partly in Utah, partly in Arizona, and partly in Nevada, the only important tributary that is a stream of interstate character.

4. The several foregoing apportionments to include all water necessary for the supply of any rights which may now exist, including water for Indian lands in each of said States.

5. Arizona and California each may divert and use one-half of the unapportioned waters of the main Colorado River flowing below Lees Ferry, subject to future equitable apportionment between the said States after the year 1963, and on the specific condition that the use of said waters between the States of the lower basin shall be without prejudice to the rights of the States of the upper basin to further apportionment of water as provided by the Colorado River compact.

As I said, the State of California refused to accept the Denver apportionment. At the close of the conference the Arizona-Colorado River Commission addressed this statement to the governors of the upper division of the Colorado River Basin:

The lawful representatives of the State of Arizona, members of the Colorado River Commission of said State, and their advisers, in attendance upon the conference called by you and convened at the city of Denver, Colo., on July 22, 1927, deeply regret that the full purpose of the conference, to bring about an agreement which would result in complete ratification by seven States of the Colorado River compact and solution of the Colorado River problem, has not been effected.

Such agreement not having been reached, we desire at this time to state concretely Arizona's position, as taken by her representatives at this conference and disclosed by the record, in a sincere and earnest effort to accomplish the purposes thereof.

This is the important part of the document with respect to water:

We hold that Arizona possesses the land, the natural facilities, to economically utilize within her borders a very large proportion, if not all, of the waters of the Colorado River system available for irrigational use in the lower basin; that as a matter of justice, right, and equity, if the law of prior appropriation is to be superseded by a compact, she is entitled to the undisturbed, undisputed, and unlimited use, to the extent that such use is feasible, of the waters of her tributary streams, just as the State of California is entitled to and has the use of the water of her streams, and that she is equally entitled to at least one-half of the flow of the main stream of the Colorado River available for use in the States of the lower division, after due allowance is made for the practical irrigational requirements of the State of Nevada. Nevertheless, for the purpose of effecting an agreement at this time, and out of consideration for the untiring efforts of the governors of the States of the upper division to bring about such an agreement, and in deference to their judgment as to what under the circumstances would be fair and reasonable, we have accepted, with certain interpretations of language relating to the immunization of Arizona's tributaries against depletion for the benefit of Mexico, the proposal of the governors of the States of the upper division submitted on September 19, 1927, which said proposal, so interpreted, would allocate to the State of California 4,200,000 acre-feet of water per annum; to Arizona, 3,000,000 acre-feet and the right to the use of such of the waters of her tributaries as may be diverted therefrom for beneficial use; and would divide the unallocated flow of the river, available for the use of the lower-division States, equally between Arizona and California.

Nothing was accomplished by the Denver conference with respect to a division of water by reason of the fact that California refused to accept the recommendation made by the four governors, and so the matter stood when Congress met.

Mr. JOHNSON. Mr. President, may I ask the Senator a question?

Mr. HAYDEN. Certainly.

Mr. JOHNSON. Does the Senator assert that Arizona accepted the recommendations made by the governors?

Mr. HAYDEN. I have just read the last word that Arizona said on that subject.

Mr. JOHNSON. With certain reservations.

Mr. HAYDEN. Arizona accepted the water proposal of the upper-basin governors with certain reservations, interpretative only with respect to any demand for water that might be made by Mexico. We will not disagree at all that the Arizona acceptance of the proposal was not consummated by a further negotiation and understanding until the minds of the governors and the representatives of all the States actually met and agreed upon the document. If they had done so, the controversy would have been over.

When Congress assembled in December, 1927, no agreement had been made. The senior Senator from Nevada [Mr. PITTMAN], in continuation of the earnest efforts that he has made all these years to bring about a settlement of the controversy between the States with respect to the Colorado River, invited a number of us to conferences in his office and there we talked over the situation.

It was discovered at that time, as the Senator said, that instead of being able to divide the 7,500,000 acre-feet of water, which was not enough to satisfy the demands of all the States, we could legally, under the terms of the Colorado River compact, divide an additional million acre-feet. Therefore the proposal was made that the recommendation made by the governors

of the four upper-basin States be accepted and that there be added thereto the additional million acre-feet of water apportioned by the compact to the lower basin, and that that quantity of water be divided equally between California and Arizona, which would increase the total apportionment to each State by 500,000 acre-feet. By the new plan the State of California would have 4,700,000 acre-feet of water in the main stream of the Colorado River, or 100,000 acre-feet more than that State asked for at Denver, and the State of Arizona would have 3,500,000 acre-feet, or within 100,000 acre-feet of the quantity she originally asked for at Denver. By such an arrangement it was felt that the rights and the desires of all of the States could be accommodated. That arrangement has been incorporated in the amendment which I have offered to the bill and which is now pending. I would like to discuss that amendment in detail.

Mr. JOHNSON. Is the Senator speaking now to the amendment he offered to-day?

Mr. HAYDEN. Yes. Senators will find printed copies of the amendment on their desks. It was not available early to-day, but has since been distributed.

I invite the attention of the Senate to the amendment. It proposes to strike out of the original Senate bill that has now been offered as an amendment to the House bill, which is before the Senate, the reference to the approval of the Colorado River compact which appears in the bill upon a 6-State basis, and insert in lieu thereof the following:

> This act shall not take effect, and no authority shall be exercised hereunder, unless and until the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming shall have ratified the Colorado River compact mentioned in section 12 hereof, and the President, by public proclamation, shall have so declared.

So the first substantive proposal in the amendment is a 7-State ratification of the Colorado River compact and, as I have said so many times, that is the chief concern of the four States of the upper basin. The proviso reads:

> That the ratification act of the State of California shall contain a provision agreeing that the aggregate annual consumptive use by that State of waters of the Colorado River shall never exceed 4,200,000 acre-feet of the water apportioned to the lower basin by paragraph (a), of Article III, of said compact.

Mr. CARAWAY. Mr. President, may I ask the Senator a question?

Mr. HAYDEN. I yield.

Mr. CARAWAY. I have always been interested in this question. California is the last point on the river where any use of the water will be made, is it not?

Mr. HAYDEN. That is correct.

Mr. CARAWAY. Then what concern is it of the States above there as to how much of the water that has already passed their borders shall be used in California? I do not just understand that point.

Mr. HAYDEN. The Senator does not understand the situation because he does not happen to be familiar with the doctrine of appropriation, as we call it in the West.

Mr. CARAWAY. I think I understand that, but the man who may be restrained and should be restrained is the man who is on the upper reaches of the river, because if he uses all of the water there is nothing for the lower riparian owners.

Mr. HAYDEN. That is exactly the point. The appropriators up the stream would be restrained from using the water if the State of California acquired a prior right to use it, and their fear is that under the law of appropriation the State of California would acquire such a right.

Mr. CARAWAY. And afterwards, when they wanted to use more water, they would meet a prior right to diversion of the water by California.

Mr. HAYDEN. Yes.

Mr. BRATTON. Mr. President——

Mr. HAYDEN. I yield to the Senator from New Mexico.

Mr. BRATTON. As a representative of one of the upper basin States, I may say that we of the upper basin States furnish 84 per cent of the water of the Colorado River. Under the doctrine of appropriation which obtains there, if California puts all of the water to beneficial use, later, when we desire to use what we conceive to be our just share of it, we shall be deprived of it.

Mr. CARAWAY. I understand it now.

Mr. BRATTON. That is how we are deeply interested.

Mr. CARAWAY. The Senator does not want somebody to acquire a prior right to so much water that, when some one in his State wants to develop in an agricultural way, there will be no water for his use.

Mr. BRATTON. Yes. The Colorado River compact, on which this legislation is founded, has adjudicated the title to the water by awarding to the States in the upper basin 7,500,000 acre-feet annually and to the States in the lower basin 7,500,000 acre-feet annually.

Mr. CARAWAY. I think I understand it now, and I thank the Senator.

Mr. HAYDEN. Mr. President, in that connection I invite the attention of the Senate to the Johnson bill as reported to the Senate, on page 7 of which there is this proviso in section 5 as recommended by the Committee on Irrigation and Reclamation:

> *Provided, however,* That said contracts shall not provide for an aggregate annual consumptive use in California of more than 4,600,000 acre-feet of the water allocated to the lower basin by the Colorado River compact mentioned in section 12 and one-half of the unallocated excess, and/or surplus water: *Provided further,* That no such contracts shall be made until California, by act of its legislature, shall have ratified and approved the foregoing provision for use of water in said State.

Mr. CARAWAY. Mr. President, may I ask the Senator another question?

Mr. HAYDEN. I yield.

Mr. CARAWAY. The Senator seems to have such a clear grasp of the situation that I am much interested in his presentation. Can the Legislature of the State of California prevent the acquiring of the right to use water by landowners?

Mr. HAYDEN. It can.

Mr. CARAWAY. Suppose they go ahead and have already done so, and put to beneficial use a larger volume of the water than the amount that is now attempted to be allocated to California?

Mr. HAYDEN. If landowners had put to beneficial use—and that implies a perfected right—a certain quantity of water, that right could not be taken away from them. That could not be done without violating the Constitution of the United States. But in truth and in fact the present perfected or vested rights to the use of water in the State of California are not in excess of 4,600,000 acre-feet. There may be initiated rights or inchoate rights, but there is not that much water available to the citizens of California at the present time and there will not be until storage is provided.

Mr. CARAWAY. What constitutes a vested right in water—merely digging a ditch and diverting the water?

Mr. HAYDEN. The doctrine of appropriation is that the right to the use of water is acquired by its application to the land.

Mr. CARAWAY. Is there any statute of limitations? If a man has once applied the water to his land does he thereby acquire a vested right to that much water from that time on?

Mr. HAYDEN. No. Many States have a provision of law on that point. In Arizona if the land is not irrigated for five years the right to the water may lapse.

Mr. CARAWAY. What I am trying to get at is this. Perhaps I am not very happy in expressing it. The right to use the water vests immediately upon making the application of it. For instance, if some one has land susceptible of irrigation and he digs a ditch and turns the water in, does he acquire then a vested right in that much water?

Mr. HAYDEN. Yes; a right which is superior to that of any other person who may thereafter apply the water to beneficial use.

Mr. CARAWAY. In other words, if somebody above him seeks to use the water in such a way as to cut down the amount of water available to him, would there be any way of restraining him from using it?

Mr. HAYDEN. That has been done in many instances.

Mr. CARAWAY. I can see the importance of the Senator's provision in the bill. How is California, by an act of its legislature, to bar anyone from acquiring the use of water in excess of that amount?

Mr. HAYDEN. That was the idea, undoubtedly, of the Committee on Irrigation and Reclamation in reporting out the amendment to the bill which I have read.

Mr. CARAWAY. Let me ask the Senator a further question. I was much interested in the exchange of views between the senior Senator from California [Mr. JOHNSON] and the Senator from Arizona this afternoon with reference to the development of power. What interest has Arizona in the question of whether the Government or private individuals shall finance the development of power?

Mr. HAYDEN. I would prefer to discuss power another time, but I want to answer the Senator's question. However, I hope it will not lead to any extended discussion of the power question.

Mr. CARAWAY. I am perfectly willing to wait.

Mr. HAYDEN. I can answer the Senator very briefly by saying that so far as the State of Arizona is concerned it is a matter of no interest to her, and so far as her people are concerned the great majority of them would prefer that the power be developed by public agencies rather than by private agencies. But we do feel under any circumstances, whether the development be by public or private agencies, that the fact that it is by public agency, the Federal Government, for instance, should not be used as an excuse to deprive the State of revenue which it would otherwise receive.

Mr. CARAWAY. Then the only difference between the State of Arizona and the State of California is whether the users of this power should pay an additional price above the cost of production which should be paid to the State as a tax.

Mr. HAYDEN. Exactly so. If a private power company builds the dam and power plant and sells power to the consumers in the State of California, they would add in, as a part of the cost of the power, the taxes that were paid in Arizona and in California. Therefore the only persons affected are the users of power in California, and they have an interest whether they get their power cheaper or not.

Mr. CARAWAY. I can understand that, but if the amount that should be paid by the consumers of power, which would be refunded to the States in the form of a tax, could be agreed upon, and if a division of water could be agreed upon, then there would be no further question between the States?

Mr. HAYDEN. That would solve the problem.

Mr. CARAWAY. There would be no dispute then, and it would make no difference to Arizona—that is what I am trying to get clear in my mind—whether the power was developed by a private concern or by a public agency if Arizona were assured that she could be permitted to levy a fair tax upon the properties within the State?

Mr. HAYDEN. Either to levy a fair tax or to obtain compensation that would be equivalent to the payment of taxes.

Mr. CARAWAY. Of course, the Senator will understand that he would have to write into the bill the amount that was to be deducted; would he not?

Mr. HAYDEN. Yes.

Mr. CARAWAY. Because there would be no way for the State to reach the Federal Government after a development was made.

Mr. HAYDEN. That is true. The only way that any such payment could be obtained would be with the consent of Congress; but, as I pointed out in the very extended address that I made to the Senate at the last session of Congress, there are a very large number of instances where Congress has thus consented.

Mr. CARAWAY. Of course; I understand that. We are paying taxes to some people in Oregon on lands that the Government took for spruce development and then sold to a private concern.

Mr. HAYDEN. One of the best illustrations, I think, is the case of the national banks. The States sought to tax the national banks, but the Supreme Court decided that they were an instrumentality of the United States and could not be taxed. Congress, however, authorized the States to collect such taxes. There are many instances of that kind.

Mr. CARAWAY. I am just trying to find out what is actually the difference between those who oppose and those who favor the dam. As I finally understand, the only question is as to the volume of water that California may eventually claim and the question of whether or not a State in which the development takes place may have a right to receive and be guaranteed that it will receive a certain sum in lieu of taxes. That is the only question.

Mr. HAYDEN. The Senator has stated it as clearly as it could be stated.

Mr. CARAWAY. If I stated it as clearly as the Senator was stating it, I am happy, indeed. I merely wanted to know what the dispute was.

Mr. HAYDEN. The hour is getting late. If I may, I should like to continue the reading of the amendment that I have offered so that I may explain its terms. I have read the proposal now contained in the bill as reported to the Senate and as recommended by the Senate Committee on Irrigation and Reclamation for the purpose of pointing out that the committee placed in the bill the 4,600,000 acre-feet of water, which, as I have said, was the demand made by California; whereas in the amendment that I have offered is 4,200,000 acre-feet of water, which is the quantity recommended for apportionment to California by the governors of the four upper basin States. Thus far the provisions are the same except for the difference of 400,000 acre-feet. To go on with the amendment, which provides further—

and that the aggregate beneficial consumptive use by that State of waters of the Colorado River shall never exceed 500,000 acre-feet of the water apportioned by the compact to the lower basin by paragraph (b) of said Article III—

That refers to the extra million acre-feet apportioned to the lower basin by the Colorado River compact. So that, adding together the 4,200,000 acre-feet apportioned by paragraph (a) of Article III of the Colorado River compact and the 500,000 acre-feet apportioned to the lower basin by paragraph (b) of the same article of the compact the total quantity of water which we ask the State of California to be limited to is 4,700,000 acre-feet out of the main stream of the Colorado River, which is 100,000 acre-feet more than California demanded at Denver.

In addition my amendment provides—

and that the use by California of the excess or surplus waters unapportioned by the Colorado River compact shall never exceed annually one-half of such excess or surplus waters.

A similar provision is found in the committee amendment, and a similar provision is found in the recommendation of the governors, that the excess or surplus water be divided equally between the two States—

and that the limitations so accepted by California shall be irrevocable and unconditional, unless modified by the agreement described in the following paragraph, nor shall said limitations apply to water diverted by or for the benefit of the Yuma reclamation project for domestic, agricultural, or power purposes except to the portion thereof consumptively used in California for domestic and agricultural purposes.

That last phrase appears in the amendment as a sort of supercaution, so to speak. There were those who feared because the water used for irrigation upon the Yuma project in Arizona was first diverted from the Colorado River in California, carried for some distance in that State, and conveyed into Arizona by a siphon which goes under the Colorado River, that unless specific mention was made of the fact, California, because the water was diverted in that State, might be charged with water used in Arizona. Of course, we had no intention of doing anything of that kind and protected that point accordingly.

I have read what California is required to do and how that State is limited. Let me now tell the other side of the story, as it appears in the amendment.

The said ratifying act—

That is, the ratifying act of the Legislature of California—

shall further provide that if by tri-State agreement hereafter entered into by the States of California, Nevada, and Arizona the foregoing limitations are accepted and approved as fixing the apportionment of water to California, then California shall and will therein agree (1) that of the 7,500,000 acre-feet annually apportioned to the lower basin by paragraph (a) of Article III of the Colorado River compact, there shall be apportioned to the State of Nevada 300,000 acre-feet—

That is, the quantity apportioned to Nevada by the governors' conference at Denver—

and to the State of Arizona 3,000,000 acre-feet for exclusive beneficial consumptive use in perpetuity—

That likewise agrees with the recommendation made by the governors of the upper basin States—

and (2) of the 1,000,000 acre-feet in addition which the lower basin has the right to use annually by paragraph (b) of said article, there shall be apportioned to the State of Arizona 500,000 acre-feet for beneficial consumptive use—

Again dividing the water equally with California so far as the additional million acre-feet are concerned—

and (3) that the State of Arizona may annually use one-half of the excess or surplus waters unapportioned by the Colorado River compact, and (4) that the State of Arizona shall have the exclusive beneficial consumptive use of the Gila River and its tributaries within the boundaries of said State—

As I have already explained to the Senate, the Gila River empties into the Colorado River below the Laguna Dam. It empties into it at a point where neither the State of California nor any other State can use any of its surplus waters. Therefore we felt justified in asking the State of California to exclude from any computation of water the Gila River and its tributaries. The only other area that could have any possible claim upon the waters of the Gila River is Old Mexico, and even Mexico could not obtain any water from that stream in time of drought when the water was needed—

and (5) that the waters of the Gila River and its tributaries shall never be subject to any diminution whatever by any allowance of

water which may be made by treaty or otherwise to the United States of Mexico but if, as provided in paragraph (c) of Article III of the Colorado River compact, it shall become necessary to supply water to the United States of Mexico from waters apportioned by said compact, then the State of California shall and will mutually agree with the State of Arizona to supply one-half of any deficiency which must be supplied to Mexico by the lower basin.

During the consideration of the Colorado River compact by the Arizona Legislature those who opposed the approval of that agreement asserted that if the Legislature of Arizona ratified the Colorado River compact it would place a cloud upon the appropriation of all waters in the State of Arizona. Some were even so frightened as to think in case the Senate should ratify a treaty with Mexico granting a certain quantity of water to that country and the demand was made for it, that the treaty would be the supreme law of the land, and that the gates of the Roosevelt Dam or the gates of the Coolidge Dam would have to be opened and water turned down to Old Mexico.

It is an utterly foolish thing, a thing that it is physically impossible to do, but at the time it made an impression upon the minds of many people in the State of Arizona. They felt that they had in existence at this time actual, completely protected, bona fide, vested rights—if I knew of any other term that would describe the perfect water right which they possess I would use it—and they did not want to agree that a cloud of any kind could be placed upon their title to the use of that water. I refer particularly to the water now being used under the Salt River project. Therefore there has been insistence from time to time that the Gila River, of which the Salt River is the principal tributary, be exempt from any claim in the future so far as water for Mexico is concerned. But it will be noticed, Mr. President, that the State of Arizona and the State of California, if this agreement shall be carried out, will mutually agree to share equally the Mexican burden out of the waters of the main stream of the Colorado River.

In truth and in fact that is the only place where any water could be obtained for use in Mexico. In our arguments with our California brethren we have found a peculiar situation. It was their desire to place upon paper the total amount of water running in every little stream in the State of Arizona which was tributary to the Colorado River, add that to the total quantity of water in the main stream, and then say, "This total quantity of water is subject to the burden of furnishing water to Old Mexico, or may be subject under some future treaty. Taking the total water of the Arizona tributaries and the total water flowing in the main stream, we will divide the obligation to furnish water to Mexico upon that basis."

The water that is to be furnished to Mexico must all come out of the main river; we all agree to that; but the net result of such figuring on paper would result in Arizona being compelled to supply the great bulk of the water that must be supplied to Mexico under any treaty, and would practically exempt California from furnishing any appreciable quantity of water at all.

Arizona's answer to that contention has been that it would be just as reasonable and just as sensible to include in the total quantity of water to be calculated the flow of the Sacramento or the San Joaquin Rivers in California as to include the flow of the Gila River. In time of drought, when Mexico would make the demand for water, it would be as impossible to obtain any water out of the Gila River and deliver it to Mexico as it would be to obtain water from the Sacramento River or the San Joaquin River and deliver it to Mexico. Therefore we have said, and I think justly and fairly, that we were willing to divide with California the burden of furnishing water to Old Mexico, to assume an equal part of that burden, but that the delivery must be made and the division must be made out of the water that is divisible, and from the only source where water is obtainable for Mexico; to wit, the main stream of the Colorado River. That is the only place where Mexico could get it, and that is the only water that could be divided. It is unfair to add up the total quantity of water that could be impounded by the Roosevelt Dam and the Coolidge Dam and some other reservoir upon some other tributary stream in Arizona, for the reason, as I say, that, if in time of drought the gates of the reservoir were opened and the water allowed to flow out, not one drop would ever reach Mexico, because it would be compelled to flow down during the time of drought in a wide sandy river bed for hundreds of miles, and the water would be totally evaporated and lost, and Mexico could not obtain a drop of it.

We, therefore, say that it is unfair and unjust and that it is not equitable to use the quantity of water that exists in the Arizona tributaries, or may be found in them, as a basis for determining what quantity of water must be allocated to Mexico. The physical facts are against any such plan. We do say that Arizona is willing, as this amendment provides, to agree that if, under any treaty with Mexico, it is necessary for the States of the lower basin to furnish water to lands in Mexico, Arizona will furnish an equal quantity of that water with California out of the main stream of the Colorado River. We believe that to be a fair and a reasonable proposition, and one that upon investigation I am sure the senior Senator from California and his colleague will find is the only practical way in which the burden of furnishing water to Mexico can be met.

Mr. SHORTRIDGE. Mr. President, may I ask the Senator a question?

Mr. HAYDEN. I yield.

Mr. SHORTRIDGE. Do you proceed upon the theory that Arizona is entitled to the same quantity of water as California?

Mr. HAYDEN. In the main stream of the Colorado; yes.

Mr. SHORTRIDGE. Quite regardless of the population of the two States?

Mr. HAYDEN. If that were the issue, Mr. President, the State of Arizona would be entitled to much more water than the State of California. That is to say, in the total area within the drainage basin of the Colorado River there is a much larger population in the State of Arizona than there is in the State of California.

Mr. SHORTRIDGE. I merely wish to know the position the Senator is taking.

Mr. HAYDEN. We found——

Mr. SHORTRIDGE. Will you pardon me to put the question in this form, for it may hereafter be the subject of some comment:

Do you contend, as to two States divided by a given stream, that each State's right to the water is dependent upon population, present or future, or upon present irrigated lands or lands subject to future reclamation and irrigation? Is it dependent upon territory, or is it dependent upon population—upon one, or the other, or both?

Mr. HAYDEN. It seems to me that it would be impossible to use one or the other or both of those factors as a means of determining what the relative rights of the States are.

Mr. SHORTRIDGE. Would the Senator contend that State A, for example, which had a very limited population, was entitled to as much of the given water as State B, with a very great population?

Mr. HAYDEN. If State A, with limited population, were so situated that because of the topography of the country or for other reasons it could not use the water within any reasonable period of time, then the fact that an adjoining State happened to have a larger population which could use it would be one that should receive very careful consideration. That, I believe, is the view of the State of Nevada at this time.

The State of Nevada is so situated that it can not use the water, and therefore it does not ask for more than a reasonable amount. But where the two States, State A and State B, regardless of their population, have lands upon which the water can be placed to beneficial use, it does not appear to us in Arizona that merely because one State happened to be settled sooner than another, that is any reason why the development of the other State should be denied.

Mr. SHORTRIDGE. May I ask the Senator, then, a final question? I have gathered from his remarks thus far that he seemed to insist that Arizona was entitled to one full half of the given water. Has not that been the contention of the Senator?

Mr. HAYDEN. Yes; that has been the contention of my State; and so far as I am personally concerned I think that contention can still be urged in all equity and all justice. But inasmuch as the commissioners representing the State of Arizona have submitted the matter to the mediation of four governors, who went into the matter very carefully and found that they were entitled to a less amount, in order to compromise our differences we have agreed to accept less.

Mr. SHORTRIDGE. I merely wished to know the position of the Senator.

Mr. PITTMAN. Just a minute, Mr. President. The Senator has mentioned Nevada as claiming only 300,000 acre-feet. I wish to say that the position of Nevada in the matter is this:

That the sovereignty of States is equal, without regard to population; that the State of Nevada, under the law of appropriation, if it had irrigable lands to put it on, could take all of the water of the Colorado River legally and proceed to put it on those lands, if it did it without interfering with prior rights of some other State or some other people. We contend also that the State of Nevada has at least an equal right in the benefits to be derived from the use of the water from that dam, whether for power or whatever it can legitimately use it for.

The facts are stated accurately, however. While the State of Nevada might contend for one-third of this water to be used at

some future date in the development of its State, our engineers have come to the conclusion that there are only about 100,000 or so acres of land that it would be practicable to irrigate; and we estimate that 300,000 acre-feet will accomplish that. We have therefore entirely removed from consideration, as far as Nevada is concerned, the legal question which was raised by the junior Senator from California. We know we can not us it—at least, we are so advised—and we are perfectly willing and glad to allow all the rest of that water to be divided, if it may be equitably, between the other two States.

Mr. HAYDEN. Mr. President, in conclusion, let me say that I have offered this amendment in good faith. I have offered it in the exact language in which it appeared in the CONGRESSIONAL RECORD of May 28, 1928, when printed at the request of the senior Senator from Nevada [Mr. PITTMAN]. I have offered it in the exact language as prepared by Mr. Francis Wilson, of New Mexico, the interstate river commissioner of that State, a disinterested person, a lawyer of great ability, a man of high character, who honestly and sincerely has sought on every and all occasions to bring about a settlement of this controversy between the States of Arizona and California with respect to the water of the lower basin.

I hope that the senior Senator from California and his colleague will take the amendment and study it. If they can suggest any better way of arriving at a settlement of our difficulties based upon this amendment, if they can suggest changes in it that will be equitable as between the two States, I shall be delighted to confer with them and to do everything within my power to bring this matter to an adjustment.

As I understand the parliamentary situation, the House bill has been substituted for the Senate bill, and there now appears upon our desks as an amendment to the House bill the Senate bill as reported to this body. So there is one amendment pending; and the amendment which I have now offered, and which is now pending, is the only amendment to the bill at the present moment upon which a vote could be taken. Am I correct in that assumption?

The VICE PRESIDENT. The Senator is correct.

Mr. HAYDEN. I have no desire to press for a vote on my amendment. I want the Senator from California and his colleague to be thoroughly satisfied that it is a fair and a just amendment, one under which, as I have previously said, our States can both live and prosper. For that reason I ask that the amendment remain pending, or I will lay it aside for such further consideration as may be desired.

Mr. JOHNSON. Let it lie on the table, to be called up subsequently.

Mr. HAYDEN. The point I am trying to get at is, we have to take these matters one at a time.

Mr. JOHNSON. Yes. Let it be the pending amendment, if you wish.

Mr. HAYDEN. That is what I prefer.

Mr. JOHNSON. I have no objection to that.

The VICE PRESIDENT. The amendment is the pending question.

EXECUTIVE SESSION

Mr. JONES. I move that the Senate proceed to the consideration of executive business.

The motion was agreed to, and the Senate proceeded to the consideration of executive business. After three minutes spent in executive session the doors were reopened, and (at 4 o'clock and 46 minutes p. m.) the Senate adjourned until to-morrow, Friday, December 7, 1928, at 12 o'clock meridian.

NOMINATIONS

Executive nominations received by the Senate December 6, 1928

SECRETARY OF THE INTERIOR

Roy O. West, of Illinois, to be Secretary of the Interior, to which office he was appointed during the last recess of the Senate, vice Hubert Work, resigned.

SECRETARY OF COMMERCE

William F. Whiting, of Massachusetts, to be Secretary of Commerce, to which office he was appointed during the last recess of the Senate, vice Herbert Hoover, resigned.

FOREIGN SERVICE

To be secretary in the Diplomatic Service

John M. Cabot, of Massachusetts, now a Foreign Service officer, unclassified, and a vice consul of career, to be also a secretary in the Diplomatic Service of the United States of America.

GOVERNOR OF PANAMA CANAL

Col. Harry Burgess, Corps of Engineers, United States Army, for appointment as Governor of the Panama Canal, provided for by the Panama Canal act, approved August 24, 1912, vice Brig. Gen. Meriwether L. Walker, Corps of Engineers, United States Army, resigned.

INTERSTATE COMMERCE COMMISSIONERS

Claude R. Porter, of Iowa, to be an interstate commerce commissioner for a term expiring December 31, 1935. (Reappointment.)

Clyde S. Aitchison, of Oregon, to be an interstate commerce commissioner for a term expiring December 31, 1935. (Reappointment.)

Patrick J. Farrell, of the District of Columbia, to be an interstate commerce commissioner for a term expiring December 31, 1934, to which office he was appointed during the last recess of the Senate, vice John Jacob Esch.

MEMBER OF FEDERAL BOARD FOR VOCATIONAL EDUCATION

Claude M. Henry, of South Dakota, to be a member of the Federal Board for Vocational Education for a term of three years from July 17, 1928, to which office he was appointed during the last recess of the Senate. (Reappointment.)

MEMBER OF BOARD OF MEDIATION

Pat Morris Neff, of Texas, to be a member of the Board of Mediation created by section 4 of the railway labor act, approved May 20, 1926, for a term expiring five years after January 1, 1929.

APPRAISER OF MERCHANDISE

James F. Ingraham, of Peabody, Mass., to be appraiser of merchandise in customs collection district No. 4, with headquarters at Boston, Mass., in place of Samuel W. George, deceased.

JUDGE OF POLICE COURT OF THE DISTRICT OF COLUMBIA

Ralph Given, of the District of Columbia, to be judge of the police court, District of Columbia, vice George H. MacDonald, deceased. (Mr. Given is now serving under a recess appointment.)

UNITED STATES ATTORNEYS

Phillip Forman, of New Jersey, to be United States attorney, district of New Jersey, vice James W. McCarthy appointed United States district judge. (Mr. Forman is now serving under a recess appointment.)

Edmond Earl Talbot, of Louisiana, to be United States attorney, eastern district of Louisiana, vice Wayne G. Borah appointed United States district judge. (Mr. Talbot is now serving under a recess appointment.)

UNITED STATES DISTRICT JUDGES

Nelson McVicar, of Pennsylvania, to be United States district judge, western district of Pennsylvania, vice W. H. Seward Thomson, retired. (Mr. McVicar is now serving under a recess appointment.)

Edgar S. Vaught, of Oklahoma, to be United States district judge, western district of Oklahoma, vice John H. Cotteral, appointed circuit judge. (Mr. Vaught is now serving under a recess appointment.)

James W. McCarthy, of New Jersey, to be United States district judge, district of New Jersey, vice John Rellstab, retired. (Mr. McCarthy is now serving under a recess appointment.)

Wayne G. Borah, of Louisiana, to be United States district judge, eastern district of Louisiana, vice Louis H. Burns, deceased. (Mr. Borah is now serving under a recess appointment.)

George P. Hahn, of Ohio, to be United States district judge, northern district of Ohio, vice John M. Hillits, retired.

UNITED STATES CIRCUIT JUDGE

Smith Hickenlooper, of Ohio, to be United States circuit judge, sixth circuit, vice Maurice H. Donahue, deceased.

UNITED STATES MARSHAL

Howard C. Arnold, of Rhode Island, to be United States marshal, district of Rhode Island, vice William R. Rodman, resigned. (Mr. Arnold is now serving under a recess appointment.)

APPOINTMENT IN THE REGULAR ARMY

To be chaplain

Capt. Louis Curtis Tiernan to be chaplain with the rank of first lieutenant, Chaplains' Reserve, with rank from November 15, 1928.

APPOINTMENTS BY TRANSFER IN THE REGULAR ARMY

Quartermaster Corps

Capt. James Brown Golden, Field Artillery (detailed in Quartermaster Corps), with rank from July 1, 1920.

First Lieut. Fred Lebbeus Hamilton, Cavalry (detailed in Quartermaster Corps), with rank from July 10, 1925.

PROMOTIONS IN THE REGULAR ARMY

To be colonel

Lieut. Col. George Bigelow Pillsbury, Corps of Engineers, from November 30, 1928.

To be first lieutenants

Second Lieut. Leonard James Greeley, Field Artillery, from November 7, 1928.

Second Lieut. Kingsley Sherman Andersson, Corps of Engineers, from November 8, 1928.

Second Lieut. William Frishe Dean, Infantry, from November 8, 1928.

MEDICAL ADMINISTRATIVE CORPS

To be captain

First Lieut. Alfred Thompson Houck, Medical Administrative Corps, from December 3, 1928.

PROMOTIONS IN THE NAVY

MARINE CORPS

Lieut. Col. Frank J. Schwable, assistant quartermaster, to be an assistant quartermaster in the Marine Corps, with the rank of colonel from the 8th day of July, 1928.

Lieut. Col. Eli T. Fryer to be a colonel in the Marine Corps from the 27th day of October, 1928.

Lieut. Col. Richard P. Williams to be a colonel in the Marine Corps from the 3d day of November, 1928.

Maj. Clayton B. Vogel to be a lieutenant colonel in the Marine Corps from the 8th day of July, 1928.

Maj. Jeter R. Horton, assistant quartermaster, to be an assistant quartermaster in the Marine Corps with the rank of lieutenant colonel from the 27th day of October, 1928.

Maj. Henry N. Manney, jr., to be a lieutenant colonel in the Marine Corps from the 3d day of November, 1928.

Capt. Cecil S. Baker to be a major in the Marine Corps from the 24th day of June, 1928.

Capt. John F. S. Norris to be a major in the Marine Corps from the 8th day of July, 1928.

Capt. Samuel L. Howard to be a major in the Marine Corps from the 16th day of July, 1928.

Capt. Lyle H. Miller to be a major in the Marine Corps from the 27th day of October, 1928.

Capt. Anderson C. Dearing to be a major in the Marine Corps from the 3d day of November, 1928.

First Lieut. Louis G. DeHaven to be a captain in the Marine Corps from the 25th day of March, 1928.

First Lieut. John Kaluf to be a captain in the Marine Corps from the 24th day of June, 1928.

Second Lieut. Merlin F. Schneider to be a first lieutenant in the Marine Corps from the 19th day of May, 1928.

Second Lieut. Kenneth L. Moses to be a first lieutenant in the Marine Corps from the 24th day of June, 1928.

Second Lieut. Ira L. Kimes to be a first lieutenant in the Marine Corps from the 8th day of July, 1928.

Second Lieut. George F. Good, jr., to be a first lieutenant in the Marine Corps from the 18th day of August, 1928.

Second Lieut. William C. Lemly to be a first lieutenant in the Marine Corps from the 18th day of August, 1928.

Second Lieut. Merrill B. Twining to be a first lieutenant in the Marine Corps from the 18th day of August, 1928.

Second Lieut. Frank H. Lamson-Scribner to be a first lieutenant in the Marine Corps from the 30th day of August, 1928.

Second Lieut. William J. Scheyer to be a first lieutenant in the Marine Corps from the 3d day of September, 1928.

Second Lieut. William W. Davidson to be a first lieutenant in the Marine Corps from the 6th day of September, 1928.

Second Lieut. Robert H. Rhoads to be a first lieutenant in the Marine Corps from the 15th day of October, 1928.

Second Lieut. Lawrence T. Burke to be a first lieutenant in the Marine Corps from the 16th day of October, 1928.

Second Lieut. Thomas B. White to be a first lieutenant in the Marine Corps from the 26th day of October, 1928.

Second Lieut. Thomas J. Walker, jr., to be a first lieutenant in the Marine Corps from the 27th day of October, 1928.

Second Lieut. Maxwell H. Mizell to be a first lieutenant in the Marine Corps from the 2d day of November, 1928.

Second Lieut. Charles W. Kail to be a first lieutenant in the Marine Corps from the 3d day of November, 1928.

Marine Gunner Charles H. Eurton to be a chief marine gunner in the Marine Corps, to rank with but after second lieutenant, from the 10th day of June, 1927.

Marine Gunner Walter G. Allen to be a chief marine gunner in the Marine Corps, to rank with but after second lieutenant, from the 19th day of August, 1927.

POSTMASTERS

ALABAMA

John G. Bass to be postmaster at Birmingham, Ala., in place of J. G. Bass. Incumbent's commission expires December 9, 1928.

ARKANSAS

Lena Hodges to be postmaster at Sulphur Springs, Ark., in place of W. N. Stranahan. Incumbent's commission expired April 4, 1928.

COLORADO

Dwight K. Foster to be postmaster at Paonia, Colo., in place of D. K. Foster. Incumbent's commission expires December 9, 1928.

CONNECTICUT

George W. Fairgrieve to be postmaster at Bantam, Conn., in place of G. W. Fairgrieve. Incumbent's commission expires December 10, 1928.

Frank S. Merrill to be postmaster at Bristol, Conn., in place of F. S. Merrill. Incumbent's commission expires December 10, 1928.

George L. Rockwell to be postmaster at Ridgefield, Conn., in place of G. L. Rockwell. Incumbent's commission expires December 10, 1928.

DELAWARE

John W. Dimes to be postmaster at Bridgeville, Del., in place of W. P. Short. Incumbent's commission expired March 3, 1927.

Alexander R. Abrahams to be postmaster at Wilmington, Del., in place of L. W. Hickman, resigned.

IDAHO

William R. Ogle to be postmaster at Glenns Ferry, Idaho, in place of W. R. Ogle. Incumbent's commission expires December 10, 1928.

Clara H. Dunn to be postmaster at Hazleton, Idaho, in place of W. S. Dunn, deceased.

Albert T. Moulton to be postmaster at Victor, Idaho, in place of A. T. Moulton. Incumbent's commission expires December 10, 1928.

Marie E. Roos to be postmaster at Weippe, Idaho, in place of M. E. Roos. Incumbent's commission expires December 10, 1928.

Arthur N. MacQuivey to be postmaster at Wendell, Idaho, in place of A. N. MacQuivey. Incumbent's commission expires December 10, 1928.

ILLINOIS

Laurence E. Brookfelt to be postmaster at Dolton, Ill., in place of L. E. Brookfelt. Incumbent's commission expires December 10, 1928.

Frederick Rugen to be postmaster at Glenview, Ill., in place of Frederick Rugen. Incumbent's commission expires December 10, 1928.

Jean T. Johnson to be postmaster at Kewanee, Ill., in place of B. R. Johnson, deceased.

Homer W. Witter to be postmaster at Kingston, Ill., in place of H. W. Witter. Incumbent's commission expires December 10, 1928.

William E. Kitch to be postmaster at Niantic, Ill., in place of W. E. Kitch. Incumbent's commission expires December 10, 1928.

Chester O. Burgess to be postmaster at Sigel, Ill., in place of C. O. Burgess. Incumbent's commission expires December 10, 1928.

Vera M. Carlson to be postmaster at Woodhull, Ill., in place of V. M. Carlson. Incumbent's commission expires December 10, 1928.

INDIANA

Ernest R. Newman to be postmaster at Greens Fork, Ind. Office made presidential July 1, 1928.

IOWA

Della Douthit to be postmaster at Braddyville, Iowa, in place of Della Douthit. Incumbent's commission expires December 9, 1928.

Earl P. Patten to be postmaster at Danbury, Iowa, in place of E. P. Patten. Incumbent's commission expires December 9, 1928.

Perry E. Rose to be postmaster at Earlham, Iowa, in place of P. E. Rose. Incumbent's commission expires December 9, 1928.

Harry E. Blomgren to be postmaster at Fort Dodge, Iowa, in place of H. E. Blomgren. Incumbent's commission expires December 9, 1928.

Arthur W. McIsaac to be postmaster at Rockwell City, Iowa, in place of A. W. McIsaac. Incumbent's commission expires December 9, 1928.

Richard L. Logan to be postmaster at Ruthven, Iowa, in place of I. J. Foy, resigned.

William H. Ward to be postmaster at Ryan, Iowa, in place of W. H. Ward. Incumbent's commission expired May 19, 1928.

Frank E. Lundell to be postmaster at Stratford, Iowa, in place of F. E. Lundell. Incumbent's commission expires December 9, 1928.

William Stevens to be postmaster at Templeton, Iowa, in place of William Stevens. Incumbent's commission expires December 9, 1928.

KANSAS

Emil Dolecek to be postmaster at Holyrood, Kans., in place of Emil Dolecek. Incumbent's commission expires December 9, 1928.

Pearl M. Mickey to be postmaster at Zurich, Kans., in place of P. M. Mickey. Incumbent's commission expires December 9, 1928.

MAINE

Charles W. Abbott to be postmaster at Albion, Me., in place of C. W. Abbott. Incumbent's commission expires December 10, 1928.

George H. Williams to be postmaster at Alfred, Me., in place of G. H. Williams. Incumbent's commission expires December 10, 1928.

Emily E. Pynes to be postmaster at Sangerville, Me., in place of E. E. Pynes. Incumbent's commission expired March 27, 1928.

MASSACHUSETTS

John P. McKay to be postmaster at Wellfleet, Mass., in place of J. P. McKay. Incumbent's commission expired June 6, 1928.

MICHIGAN

Edna M. Park to be postmaster at Alden, Mich., in place of E. M. Park. Incumbent's commission expires December 9, 1928.

George W. Paton to be postmaster at Almont, Mich., in place of G. W. Paton. Incumbent's commission expires December 9, 1928.

June L. Oliver to be postmaster at Beaverton, Mich., in place of J. L. Oliver. Incumbent's commission expires December 9, 1928.

Euphemia Hunter to be postmaster at Cass City, Mich., in place of Euphemia Hunter. Incumbent's commission expires December 9, 1928.

Alpheus P. Decker to be postmaster at Deckerville, Mich., in place of A. P. Decker. Incumbent's commission expires December 9, 1928.

Willard A. Hilliker to be postmaster at Dryden, Mich., in place of W. A. Hilliker. Incumbent's commission expires December 9, 1928.

John Anderson to be postmaster at Gwinn, Mich., in place of John Anderson. Incumbent's commission expires December 9, 1928.

Edwin W. Klump to be postmaster at Harbor Beach, Mich., in place of E. W. Klump. Incumbent's commission expires December 9, 1928.

Herbert E. Gunn to be postmaster at Holt, Mich., in place of H. E. Gunn. Incumbent's commission expires December 9, 1928.

Norman E. Weston to be postmaster at Kent City, Mich., in place of N. E. Weston. Incumbent's commission expires December 9, 1928.

Ernest L. Storbeck to be postmaster at Kinde, Mich., in place of E. L. Storbeck. Incumbent's commission expires December 9, 1928.

David J. Doherty to be postmaster at Marlette, Mich., in place of D. J. Doherty. Incumbent's commission expires December 9, 1928.

Noel H. Allen to be postmaster at Maple Rapids, Mich., in place of N. H. Allen. Incumbent's commission expires December 9, 1928.

Grace L. Riker to be postmaster at Millington, Mich., in place of W. C. Garvin, deceased.

Clinton E. Aukerman to be postmaster at Montgomery, Mich., in place of C. E. Aukerman. Incumbent's commission expires December 9, 1928.

M. Adele Zinger to be postmaster at Ruth, Mich., in place of M. A. Zinger. Incumbent's commission expires December 9, 1928.

Fred Alford, sr., to be postmaster at Vulcan, Mich., in place of Fred Alford, sr. Incumbent's commission expires December 9, 1928.

Willa A. Ruggles to be postmaster at Whitehall, Mich., in place of W. A. Ruggles. Incumbent's commission expires December 9, 1928.

MINNESOTA

Anna C. Dallaire to be postmaster at Ah-gwah-ching, Minn., in place of P. M. Hall, deceased.

Edward C. Ellertson to be postmaster at Gully, Minn., in place of E. C. Ellertson. Incumbent's commission expires December 9, 1928.

Walter E. Johnson to be postmaster at New Richland, Minn., in place of W. E. Johnson. Incumbent's commission expired December 19, 1927.

Emil Rasmussen to be postmaster at Sleepy Eye, Minn., in place of Emil Rasmussen. Incumbent's commission expires December 9, 1928.

Carrie B. Quinn to be postmaster at Wells, Minn., in place of C. B. Quinn. Incumbent's commission expires December 9, 1928.

MISSOURI

George C. Blackwell to be postmaster at Breckenridge, Mo., in place of G. C. Blackwell, deceased.

NEW JERSEY

George W. Karge to be postmaster at Franklinville, N. J. Office became presidential July 1, 1928.

Marie M. Giroud to be postmaster at Sewaren, N. J., in place of T. F. Zettlemoyer, deceased.

NEW YORK

Irving S. Sears to be postmaster at Hamilton, N. Y., in place of L. C. Beebe, resigned.

Charles F. Brandt to be postmaster at Liverpool, N. Y., in place of H. E. Sargent, removed.

Albert N. Cobb to be postmaster at Norwich, N. Y., in place of W. A. Baldwin, removed.

NORTH CAROLINA

Ella N. Painter to be postmaster at Cullowhee, N. C., in place of E. N. Painter. Incumbent's commission expires December 9, 1928.

Frances K. Thagard to be postmaster at Pembroke, N. C., in place of F. K. Thagard. Incumbent's commission expires December 9, 1928.

NORTH DAKOTA

Lena L. Hintz to be postmaster at Dunn Center, N. Dak., in place of L. L. Hintz. Incumbent's commission expired June 15, 1926.

OHIO

Maurice M. Murray to be postmaster at Bluffton, Ohio, in place of M. M. Murray. Incumbent's commission expires December 10, 1928.

John W. Keel to be postmaster at Bolivar, Ohio, in place of J. W. Keel. Incumbent's commission expires December 10, 1928.

William H. Fellmeth to be postmaster at Canal Fulton, Ohio, in place of W. H. Fellmeth. Incumbent's commission expires December 10, 1928.

Albert A. Sticksel to be postmaster at Newtown, Ohio, in place of A. A. Sticksel. Incumbent's commission expires December 10, 1928.

Glenn B. Rodgers to be postmaster at Washington Court House, Ohio, in place of G. B. Rodgers. Incumbent's commission expires December 10, 1928.

OREGON

Amy L. Morand to be postmaster at Boring, Oreg., in place of W. A. Morand, resigned.

George C. Peterson to be postmaster at Bay City, Oreg., in place of G. C. Peterson. Incumbent's commission expires December 9, 1928.

Albert N. Johnson to be postmaster at Estacada, Oreg., in place of A. N. Johnson. Incumbent's commission expires December 9, 1928.

Emma M. C. Breshears to be postmaster at Lexington, Oreg., in place of E. M. C. Breshears. Incumbent's commission expires December 9, 1928.

Sadie B. Jones to be postmaster at Oakridge, Oreg., in place of S. B. Jones. Incumbent's commission expires December 9, 1928.

Erle N. Hurd to be postmaster at Seaside, Oreg., in place of E. N. Hurd. Incumbent's commission expires December 9, 1928.

Eva M. Stewart to be postmaster at Westfir, Oreg. Office became presidential July 1, 1928.

Mary F. Melvin to be postmaster at West Linn, Oreg., in place of M. F. Melvin. Incumbent's commission expires December 9, 1928.

Arthur W. Hodgman to be postmaster at Westport, Oreg., in place of O. O. Follo, removed.

PENNSYLVANIA

Sara A. Conrath to be postmaster at Dixonville, Pa., in place of S. A. Conrath. Incumbent's commission expires December 10, 1928.

David M. Gilbert to be postmaster at Hellam, Pa., in place of D. M. Gilbert. Incumbent's commission expired June 6, 1928.

James Matchette to be postmaster at Hokendauqua, Pa., in place of James Matchette. Incumbent's commission expires December 9, 1928.

Mearl W. Smith to be postmaster at Wehrum, Pa., in place of A. E. Chick, deceased.

Charles B. Rothenberger to be postmaster at West Leesport, Pa. Office became presidential July 1, 1928.

PORTO RICO

Leonor G. Rodriguez to be postmaster at Guayanilla, P. R., in place of L. G. Rodriguez. Incumbent's commission expires December 10, 1928.

Arturo G. Molina to be postmaster at Juncos, P. R., in place of A. G. Molina. Incumbent's commission expires December 10, 1928.

Teodoro M. Lopez to be postmaster at Vega Baja, P. R., in place of T. M. Lopez. Incumbent's commission expires December 10, 1928.

SOUTH CAROLINA

Melvin L. Sipe to be postmaster at Fountain Inn, S. C., in place of M. L. Sipe. Incumbent's commission expires December 10, 1928.

Albert H. Askins to be postmaster at Timmonsville, S. C., in place of A. H. Askins. Incumbent's commission expires December 9, 1928.

Jasper E. Watson to be postmaster at Travellers Rest, S. C., in place of J. E. Watson. Incumbent's commission expires December 10, 1928.

James J. Vernon, jr., to be postmaster at Wellford, S. C., in place of J. J. Vernon, jr. Incumbent's commission expires December 10, 1928.

TENNESSEE

Hattie B. Huskins to be postmaster at Petros, Tenn. Office became presidential July 1, 1928.

TEXAS

Jefferson F. House to be postmaster at Bridgeport, Tex., in place of J. F. House. Incumbent's commission expires December 10, 1928.

Ralph B. Martin to be postmaster at Camden, Tex., in place of R. B. Martin. Incumbent's commission expires December 10, 1928.

Dewitt T. Cook to be postmaster at Centerville, Tex., in place of D. T. Cook. Incumbent's commission expires December 10, 1928.

John W. Claiborne to be postmaster at Charlotte, Tex., in place of J. W. Claiborne. Incumbent's commission expires December 10, 1928.

William R. Dickens to be postmaster at Eden, Tex., in place of W. R. Dickens. Incumbent's commission expires December 10, 1928.

William E. Barron to be postmaster at Iola, Tex., in place of W. E. Barron. Incumbent's commission expires December 10, 1928.

Edmund A. Giese to be postmaster at Lagrange, Tex., in place of E. A. Giese. Incumbent's commission expires December 10, 1928.

John L. Vaughan to be postmaster at Lubbock, Tex., in place of J. L. Vaughan. Incumbent's commission expires December 10, 1928.

Henry O. Wilson to be postmaster at Marshall, Tex., in place of H. O. Wilson. Incumbent's commission expires December 10, 1928.

Marion Zercher to be postmaster at Mount Vernon, Tex., in place of Marion Zercher. Incumbent's commission expires December 10, 1928.

John R. Ware to be postmaster at Nederland, Tex., in place of J. R. Ware. Incumbent's commission expires December 10, 1928.

Millard H. Edwards to be postmaster at Nixon, Tex., in place of M. H. Edwards. Incumbent's commission expires December 10, 1928.

Robert L. Mobley to be postmaster at Santa Anna, Tex., in place of R. L. Mobley. Incumbent's commission expires December 10, 1928.

Pearl B. Monke to be postmaster at Weinert, Tex., in place of P. B. Monke. Incumbent's commission expires December 10, 1928.

Hugh F. Skelton to be postmaster at Wylie, Tex., in place of H. F. Skelton. Incumbent's commission expires December 10, 1928.

WASHINGTON

John F. Moyer to be postmaster at College Place, Wash., in place of J. F. Moyer. Incumbent's commission expired February 13, 1928.

Thurston B. Stidham to be postmaster at Doty, Wash., in place of T. B. Stidham. Incumbent's commission expires December 9, 1928.

William C. Hubbard to be postmaster at Klickitat, Wash., in place of W. C. Hubbard. Incumbent's commission expires December 9, 1928.

WISCONSIN

Marion L. Lundmark to be postmaster at Balsam Lake, Wis., in place of J. E. Lundmark, deceased.

WYOMING

John G. Bruce to be postmaster at Lander, Wyo., in place of J. G. Bruce. Incumbent's commission expires December 9, 1928.

HOUSE OF REPRESENTATIVES

THURSDAY, *December 6, 1928*

The House met at 12 o'clock noon.

The Chaplain, Rev. James Shera Montgomery, D. D., offered the following prayer:

O God, our Heavenly Father, if we have taken our daily bread and it brought us no message; if we have enjoyed a night's rest and we are not grateful; if we have received encouraging news and we are not more hallowed; if we have had enjoyment and have failed to see Thee, O Lord, forgive us and open our eyes now. Make of these blessings a glorious ministry and send us on our way and make it glow with Thy presence. Oh, may we see Thee in the creation, preservation, and in the redemption of the great, wide world. May we know Thee in the nearness and sanctity of true friendship. The power of God is on the side of him who battles for truth's sake. Glory be to Thy holy name. Amen.

The Journal of the proceedings of yesterday was read and approved.

MESSAGES FROM THE PRESIDENT

Sundry messages in writing from the President of the United States were communicated to the House by Mr. Latta, one of his secretaries.

SENATE JOINT RESOLUTIONS REFERRED

Joint resolutions of the Senate of the following titles were taken from the Speaker's table and under the rule referred as follows:

S. J. Res. 102. Joint resolution authorizing the erection of a memorial building to commemorate the winning of the Oregon country for the United States; to the Committee on the Library.

S. J. Res. 139. Joint resolution for the relief of the Iowa Tribe of Indians; to the Committee on Indian Affairs.

RESIGNATION OF A MEMBER

The SPEAKER laid before the House the following communication, which was read by the Clerk:

DECEMBER 1, 1928.

Hon. NICHOLAS LONGWORTH,

Speaker House of Representatives, Washington, D. C.

DEAR MR. SPEAKER: I hereby give notification of my resignation as a Member of the House of Representatives, to take effect as of December 15, 1928. This resignation has already been lodged with the Governor of the State of Ohio.

Very respectfully yours,

THEODORE E. BURTON.

DEATH OF THE LATE REPRESENTATIVES GEORGE M. WERTZ AND WARREN WORTH BAILEY, OF PENNSYLVANIA

Mr. LEECH. Mr. Speaker, I ask unanimous consent to address the House for two minutes.

The SPEAKER. The gentleman from Pennsylvania asks unanimous consent to address the House for two minutes. Is there objection?

There was no objection.

Mr. LEECH. Mr. Speaker, it is my regret to announce the death during the recent recess of the Hon. George M. Wertz and the Hon. Warren Worth Bailey, both of Johnstown, Pa., the two remaining ex-Members of this House from the twentieth district of Pennsylvania, the district which it is my honor to represent.

Mr. Wertz, a Member of the Sixty-eighth Congress, who died November 19, 1928, was a life-long Republican of the old school. He was a consistent friend and supporter of the late Senator Penrose, whose confidence he held during the lifetime of that great Republican leader. Mr. Wertz was successively sheriff,

State senator, county controller, and Congressman from Cambria County, which now composes the twentieth district of Pennsylvania. His outstanding ability and leadership were indicated by the fact that he became president pro tempore of the Senate of Pennsylvania during his first term in that body. Senator Wertz was honest, absolutely fearless, outspoken, and brilliant in his mental attainments as well as his political leadership. His passing marks the close of an epoch in politics in the district, a period that was graced by leadership of several types of men, but none who had the deserved respect of our county to a more marked degree than my friend, George M. Wertz.

Warren Worth Bailey died November 9, 1928. Mr. Bailey served in the Sixty-third and Sixty-fourth Congresses and was the first Democrat ever to represent that district. He was as consistent a Democrat as Mr. Wertz was a Republican. He was a real Democrat to the end, never having relinquished the position of free trade his party early accepted, and was also an apostle of Henry George in his single-tax adherence. Mr. Bailey was a brilliant journalist, as evidence of which statement he brought the Johnstown Democrat from a minor position as a mere local newspaper to a place where it attracted national attention by reason of the strength, clarity, and sincere conviction of the editorials written by its editor and owner, Mr. Bailey.

Mr. Bailey was honest and fearless in his policies and had the respect of our people to such a marked degree that while his district is normally Republican he was twice elected to represent it in this body, where he gave a very creditable account of himself and his district. As the death of Senator Wertz marks the close of a political epoch in our Republican politics, so the death of Mr. Bailey ends a definite period in the Democratic circles of our county. His place politically and journalistically will not soon be filled.

TREASURY AND POST OFFICE APPROPRIATION BILL

Mr. WOOD. Mr. Speaker, I move that the House resolve itself into the Committee of the Whole House on the state of the Union for the consideration of the bill (H. R. 14801) making appropriations for the Treasury and Post Office Departments for the fiscal year ending June 30, 1930, and for other purposes, and pending that I ask unanimous consent that the time for general debate be equally divided between the gentleman from Tennessee [Mr. BYRNS] and myself and that the time limit be not fixed at the present time.

The SPEAKER. The gentleman from Indiana moves that the House resolve itself into the Committee of the Whole House on the state of the Union for the consideration of the bill H. R. 14801; and pending that, asks unanimous consent that for to-day the time for general debate be equally divided between himself and the gentleman from Tennessee [Mr. BYRNS]. Is there objection?

There was no objection.

The motion of Mr. WOOD was agreed to.

Accordingly, the House resolved itself into the Committee of the Whole House on the state of the Union, with Mr. SNELL in the chair.

Mr. WOOD. Mr. Chairman, I ask unanimous consent that the first reading of the bill be dispensed with.

The CHAIRMAN. The gentleman from Indiana asks unanimous consent to dispense with the first reading of the bill. Is there objection?

There was no objection.

The CHAIRMAN. Under unanimous consent the time for general debate is equally divided between the gentleman from Indiana [Mr. WOOD], and the gentleman from Tennessee [Mr. BYRNS].

Mr. BYRNS. Mr. Chairman, with the consent of the gentleman from Indiana, I yield five minutes to the gentleman from Florida [Mr. SEARS].

Mr. SEARS of Florida. Mr. Chairman, and my colleagues, I am being flooded with memorials asking Congress to give relief to make floods in Florida impossible. I have just written to the State engineer of the drainage district calling attention to the fact that Senator FLETCHER, in a general bill last year secured a survey of the Everglades, Senator TRAMMELL also secured relief, and my colleague, Congressman DRANE, was successful in securing the passage of a bill which would make further floods impossible.

In the river and harbor bill now on the calendar, and which I sincerely trust we will pass, there is partial relief, but it will not give Florida all the relief that we are entitled to. I wrote him that I did not believe the governor and other State officials of our State desired to place the Florida delegation in an improper light before the public by stating we had done nothing and that we had worked in season and out of season for relief. I repeat that through the courtesy of the Speaker we were able to pass the bill that I have already referred to. I want to thank our able Speaker for the courtesy and assistance he extended to my colleague [Mr. DRANE] and myself. In 1925 my colleague [Mr. DRANE] introduced a special bill, but no relief could be secured on that bill, and in 1926 there was a flood that cost the loss of lives of two or three hundred people.

We then secured the passage of this bill in 1927. In 1928 more than 2,000 people in that area lost their lives, and many of them were northern people. Over the long-distance telephone to-day one of my good Republican friends wanted to know whether I would work for relief down there. I told him that I had been working for relief and that I would continue to do so.

I have just introduced a bill asking for other and further relief in that flooded section in order that more lives may not be lost and that no more property may be destroyed because of those conditions. This is a companion bill to the one introduced yesterday by Senator FLETCHER. Unless this Congress passes this bill or some bill giving to the people relief where more than 2,000 have already lost their lives, if another flood should occur and other lives be lost, then at my door and at your door will rest the responsibility. But my colleagues have been kind to me in the past, and I believe they will grant the relief to which we are entitled. [Applause.]

Mr. WOOD. Mr. Chairman, I yield 25 minutes to the gentleman from Michigan [Mr. CRAMTON].

DENATURANTS IN INDUSTRIAL ALCOHOL

Mr. CRAMTON. Mr. Chairman, I ask unanimous consent to extend and revise my remarks in the RECORD by inserting therein certain letters which I have in mind to read in part and discuss.

The CHAIRMAN. The gentleman from Michigan asks unanimous consent to extend his remarks in the RECORD by inserting therein certain letters to which he refers. Is there objection?

There was no objection.

Mr. CRAMTON. Mr. Chairman, at the last session there was prominently before the Congress the question as to the proper denaturants to be used in industrial alcohol. That question does not have any necessary connection with the question of prohibition except as it at that time seemed to be brought in through some desire, perhaps, to embarrass law enforcement.

The question of the use of industrial alcohol and the question as to the proper denaturants to be used in such alcohol do not necessarily have anything to do with the question of prohibition, and in my judgment it is highly regrettable that the two questions should have been tied together. As a matter of fact, great industries are building up which need to use industrial alcohol in their processes of manufacture. Those industries would be greatly endangered if any such action were to be taken by the Government as was urged in this House in the last session in the Linthicum amendment proposed to the Treasury appropriation bill. A great deal of confusion results in the minds of the public, and sometimes in the minds of the Members of this House, through loose talk about "poison alcohol," and so forth. The impression is left that this is something that is simply a result of prohibition, and that the policy of prohibition is responsible for it. That is not true. Industrial alcohol existed before we had any national prohibition.

Mr. KINDRED. Mr. Chairman, will the gentleman yield?

Mr. CRAMTON. Mr. Chairman, I prefer not to yield until I have finished my statement, if the gentleman will pardon me. The same denaturants were used at that time that are used now. Many nations to-day that have not prohibition and do not dream of having prohibition treat their industrial alcohol substantially as we do.

The particular purpose of my rising to-day has been to bring to the attention of the House the best statement that has been made from the scientific or from the industrial point of view with respect to this question, and in that view I am only echoing the view of Doctor Doran, the eminent chemist and Commissioner of Prohibition, who says that the letter to which I am about to refer—

is the best presentation of the legal and scientific background of the denatured alcohol act as at present administered that I have ever seen.

The letter of Doctor Doran in full reads as follows:

TREASURY DEPARTMENT,
BUREAU OF PROHIBITION,
OFFICE OF COMMISSIONER OF PROHIBITION,
Washington, November 1, 1928.

Mr. H. S. CHATFIELD,
101 Maiden Lane, New York City.

DEAR MR. CHATFIELD: I desire to acknowledge your letter of October 26, 1928, inclosing copy of letter of Mr. Stayton and your reply thereto

on the general subject of denaturants and the administration of the industrial alcohol provisions of the act of June 7, 1906, and the pertinent sections of the national prohibition act, particularly Title III.

In my judgment your reply is the best presentation of the legal and scientific background of the denatured alcohol act as at present administered that I have ever seen. This letter should clear the atmosphere and set the whole situation out where a thoughtful person can clearly see the picture. I appreciate your willingness to permit me to mimeograph these letters for a limited distribution to persons who are intimately concerned with the present situation. You have rendered a real service to the Bureau of Prohibition in this matter.

With kindest regards, I am

Very sincerely yours,

J. M. DORAN,
Commissioner of Prohibition.

Recently, Capt. W. H. Stayton, chairman of the board of directors of the Association against the Prohibition Amendment, addressed the following letter, under date of September 25, 1928, to Mr. H. S. Chatfield, who is chairman of the industrial alcohol committee of the National Paint, Oil, and Varnish Association.

THE ASSOCIATION AGAINST THE PROHIBITION AMENDMENT,
Washington, D. C., September 25, 1928.

W. H. Stayton, chairman board of directors; Henry H. Curran, president; Charles H. Sabin, treasurer; G. C. Hinckley, secretary; office chairman board of directors, Lexington Building, Baltimore, Md. Executive committee: Pierre S. du Pont, chairman; Benedict Crowell, Henry H. Curran, Irenee du Pont, Grayson M. P. Murphy, Charles H. Sabin, W. H. Stayton

H. S. CHATFIELD, Esq.,
101 Maiden Lane, New York, N. Y.

DEAR MR. CHATFIELD: I have your letter of September 20, and in order to keep Major Curran informed, I am following your example and sending him a copy of this letter.

I do not know Major Curran's feeling concerning the poison alcohol matter and it may well be that the details of the situation have not been brought before him.

I feel that there is some necessity for explaining a bit, for although you and I ought to be in complete accord on this matter, I find that we are at present in real opposition, and I believe that is because we are not talking about exactly the same thing, and that each of us perhaps has a misapprehension as to the position of the other.

Broadly speaking, it has always seemed to me to be true that the users of industrial alcohol should be in accord with such action as we have taken concerning what has become known as poison alcohol, and wherever I have had an opportunity to talk to the users (as for example, the officers of the Du Pont Co.) I have found after a few words of explanation, there was complete unanimity.

Therefore, I am going to take the liberty of laying the situation before you as I see it and I will be grateful for your reply commenting on the points I raise.

1. Those provisions of the Volstead Act which apply to industrial alcohol are unconstitutional and result from usurpation on the part of Congress. Obviously Congress had some power, industrial or otherwise, over alcohol before the passage of the eighteenth amendment, but such power as Congress then possessed was derived chiefly from the commerce clause of the Constitution which gave to Congress no power over alcohol, either industrial or denatured, within the border of a State or when used in intrastate commerce.

Then came the eighteenth amendment, which, if one believes in its constitutionality, must be conceded to give to Congress power (even in interstate matters) over alcohol "for beverage purposes"—and for beverage purposes only.

Now, industrial alcohol is not maintained for beverage purposes, and although it is really being used now as a beverage—that is, in my opinion, merely because of improprieties of the Volstead law.

My opinion, then, is that Congress was given no additional power whatever under the eighteenth amendment as to industrial alcohol, and that all of those provisions of the Volstead Act which touch industrial alcohol, and which go further than Congress had a right to go with that commodity prior to 1919, are null and void.

And I have been surprised that those associations, such as yours, which are interested in industrial alcohol, have not taken this constitutional ground.

2. You, I understand, think we should not use the term "poison liquor." I fear, however, that it is the fact that though I may sympathize with you in agreeing that this is a misnomer, yet as I see it it is a fact and not a condition which confronts us. I do not like the words "wet" and "dry." There are men in our organization who never took a drink, but who constitutionally oppose the eighteenth amendment, and yet they are described as "wet," and it would be very difficult to make one's self understood to the public if we described the word "wet."

The same is true of poison liquor. Condemn the newspapers if you will, but none the less the phrase "poison liquor" is part of the vernacular, and I do not believe that I at least could make myself so well understood to the average American crowd by the use of some circumlocution as I could if I used the vernacular (but I quite agree inaccurate) phrase "poison liquor."

3. I gather from your letter that you think we ought not to make any campaign based on the poison-liquor idea, even if we do not use the phrase. I understand you to maintain that the poisoning (if one wants to use that phrase) of alcohol in order to denature it is necessary, and that to campaign for any change in that respect is harmful to the industry. I think that is just where people have misunderstood us or that we have misunderstood you.

For myself I can say that I do not in the least object to the use of even a virulent poison in the denaturing of alcohol over which Congress has proper power, but I do object and I feel that this association ought to object to allowing that liquor after it is poisoned to get into circulation.

Please let me state the facts as I see them.

A. It is no crime to drink liquor. If the people who passed the eighteenth amendment had made it a crime, then the situation might be different, but there is no crime in drinking.

B. If, therefore, I go to a friend's house and he offers me a drink I am committing no legal offense if I accept his invitation and, however much a prohibitionist may talk about my violating the spirit of the law, he will be talking wildly. If he wanted the law to prevent my drinking, it should have been put in the law.

C. Now it is a fact—and the Government officers know it as well as you and I do—that there is much bootlegging going on and that this is carried on by ignorant people who have sometimes taken industrial alcohol, have improperly rectified it, and deaths have consequently resulted, and, as I have said, the man that took the drink might well have been innocent of violating any law.

D. Who, then, are the guilty parties? I suppose we would include the person who had stolen the poisoned alcohol, the person who had improperly rectified it, the person who sold it, and perhaps the person who bought it, but it is absolutely clear to my mind that if the Government or Government officials allowed the poisoned alcohol to sit out in the open in such fashion that it might be said to be improperly guarded, then there was negligence which resulted in death.

E. I talked to a Federal district attorney on this subject. He told me I think that in his district there were some 1,100 tanks or containers which held industrial alcohol or wood alcohol which would kill human beings. He said that ignorant men and some wicked men had access to these containers and that there were only eight men detailed by the Government to see that this poison was not taken by such men and distributed in the community.

F. He used to me this expression as nearly as I can recall it: "I have in my district 1,100 mad dogs owned by the United States Government and only eight men to guard them, and they are consequently running at large. It is the duty of the Government to stop that sort of thing, no matter how much it loses. If it is necessary to have the poisoned alcohol, then every container should be guarded by a Governmen officer or should in some way be kept there at Government expense under such conditions that it could never reach and kill an innocent person."

* * * * * * *

Therefore I have, in this matter, been of opinion that the Government should stop denaturing, not that it should put any more burdens on the manufacturer but rather that the Government should relieve the industrial establishment of all expense in the matter.

* * * * * * *

Suppose I put it this way. If I could visualize myself as being the head of the United States Government with authority to do what the law commanded and with the desire to do that which is right, I think I would say, in substance, this:

First. My Government has passed a prohibition law, and it desires that people should not drink at all.

Second. So far as that law goes, it is my duty to endeavor to stop drinking.

Third. As one of the aides in stopping drinking I must try to prevent the sale of denatured alcohol, so far as the Constitution permits me, because I know that denatured alcohol may be converted into a beverage.

Fourth. But the people that use denatured alcohol have their own rights, and I as a government have no moral right to put additional obligation on them and make them help me enforce prohibition law which I passed and not they.

Fifth. Therefore it will be my duty to leave the manufacturer free to use denatured alcohol just as if there were no prohibition restrictions whatever. I must not put him to any additional expense, and I must not put him under the restrictions which will handicap him in the performance of his work. But I must, on the other hand, see that the denatured alcohol is not converted into a beverage, and I must certainly and above all see that it does not get loose where it will poison people.

Holding the views on these points I have above mentioned, you will, I think, understand why when I was in charge of the details of

the association's program I took the course I did. If I am wrong in this, I should like to be convinced to the contrary, and I know I can assure you that both Major Curran and I are open minded in the matter and ready to be convinced of whatever is right.

Very truly yours,

W. H. STAYTON,
Chairman of the Board.

Mr. H. S. Chatfield is an outstanding figure in the world of industry that is interested in this problem. I have no reason to believe that he is afflicted with any radical sympathy for prohibition. He is interested in the industries with which his lifetime has been spent. The last issue of Who's Who in the Chemical and Drug Industries tells us that he has been in the shellac business from 1882 to date, and that he is now vice president and treasurer of the Kasebier Chatfield Shellac Co. During the war he was director in charge of the New York office of the War Trade Board. He is now chairman of the Industrial Alcohol Committee of the National Paint, Oil, and Varnish Association.

The letter from Captain Stayton to Mr. Chatfield brought from Mr. Chatfield the letter under date of October 26, 1928, which reads as follows.

The Clerk read the letter, as follows:

OFFICE OF THE CHAIRMAN OF THE
INDUSTRIAL ALCOHOL COMMITTEE,
New York, Friday, October 26, 1928.

Capt. W. H. STAYTON,
Chairman of the Board,
The Association Against the Prohibition Amendment,
Lexington Building, Baltimore, Md.

DEAR CAPTAIN STAYTON: Business conditions have been such as to prevent my replying more promptly to your letter of the 25th ultimo, the receipt of which has heretofore been acknowledged. I appreciate the consideration which you have given to the subject of our correspondence.

I can not agree with you that the provisions of the national prohibition act which apply to industrial alcohol are unconstitutional. According to my friends in the legal profession, all doubt in that regard would seem to have been settled some years ago by the Supreme Court of the United States in the case of Meyer Selzman *v.* The United States, which dealt specifically with denatured alcohol. It will be found in volume 268 of the court's decisions, at page 466.

Neither do I understand that, before the adoption of the eighteenth amendment, Congress did not have power to legislate with regard to alcohol except under the commerce clause of the Constitution. It is probably true that Congress could not then prohibit the manufacture of alcohol for beverage purposes and regulate its use in any manner after the tax payment, but under its taxing powers Congress did enact numerous laws affecting all alcohol produced in the United States, whether shipped in interstate commerce or not. Among them was the original denatured alcohol statute of June 7, 1906. I have never heard it contended that these laws relating to the revenue applied only to alcohol which crossed State borders. Many of such laws, passed years before the eighteenth amendment was adopted, are still on the books. The tax on ethyl alcohol attaches as soon as it comes into being, and freedom from it can only be had when the product is lawfully withdrawn from bond for denaturization or other tax-free purposes; and if the repeal of the eighteenth amendment were an accomplished fact tomorrow, tax-free denatured alcohol would be provided for and regulated under these various laws which have not the remotest connection with that amendment. Adequate denaturization, therefore, is primarily and essentially a part of our internal-revenue system and will so continue as long as alcohol is a taxable commodity.

If you are right in associating denatured alcohol with prohibition, one would expect that countries which do not have prohibition would also be without regulations for denaturing industrial alcohol. However, exactly the contrary is true. England has denatured industrial alcohol for over 70 years; France and Germany over 50. In fact, the United States was perhaps the last of the civilized nations of the earth to adopt this simple but essential method of supplying the arts and industries with a necessary raw material, while at the same time protecting the governmental revenue. It is also worthy of note that all these countries, without even one exception, find it advisable to use practically the same basic denaturing materials that are prescribed in our country.

It is to be regretted that you feel it necessary to use the term "poison liquor." As you state, it is inaccurate—a misnomer. The very fact that the phrase has a dramatic appeal to an uninformed public should make us all the more cautious in employing it. It conveys the impression that the Government deliberately "poisons" ethyl alcohol to enforce prohibition, whereas, as above stated, the same fundamental denaturants have been used in Europe for over half a century and in this country since January 1, 1907—long before our national prohibition act took effect.

Your suggestion to the effect that the Government should be compelled to guard every drop of denatured alcohol, so that it could not possibly be diverted to beverage purposes, presupposes, as does the entire agitation on the subject, that denatured alcohol is responsible for deaths and other injuries connected with the drinking of alcoholic liquors. A careful survey by eminent scientists, public health officials, and others has failed to support such a charge against denatured alcohol in practically every reported instance of death and injury from such drinking. In the majority of such cases the real cause has been declared to be excessive indulgence in ethyl-alcohol beverages obtained from wildcat stills and other bootleg sources; in fact, the most authoritative medical authorities have reached the conclusion that few, if any, deaths have resulted from denaturants in diverted industrial alcohol, and it has been found in some cases that denatured alcohol was popularly credited with deaths that were due to drinking pure methanol (wood alcohol), over which the Federal Government has no control.

I quite agree with you that "it is no crime to drink liquor," but everyone knows that with few exceptions no liquor is to be had which is not contraband. If one drinks such liquor, knowing its illegal character and the questionable sources from which it comes, it is for that person, in view of the repeated warnings by the Government, at least to make certain that the outlawed product is reasonably safe. Although not guilty of a crime, such an individual can not be said to be innocent in the sense of not knowing the danger. No law can wholly protect a man from his own foolhardy act.

You refer to a statement by an unnamed public official on the above subject. I speak for business men, who can certainly be trusted to know more about the disposition of their product than anybody else. We surely known within very close limits how much denatured alcohol is made and how much is used by legitimate manufacturing interests. We also realize that the bootlegger instead of going to the trouble and expense of attempting to "clean" industrial alcohol is finding it cheaper and easier to "make his own" from corn sugar and other substances obtainable at every cross-roads store. Such liquor, made hastily and with inadequate equipment, may very well be poisonous, but it has no relation to denaturants in industrial alcohol.

There seems to be a deplorable misunderstanding in your conception as to the attitude of industry toward the principle of denaturization and the denaturants employed. Please bear in mind that the denatured alcohol law of 1906 was passed at the instance of leading merchants in all lines who are compelled to use alcohol in their manufacturing processes. As one who took a prominent part in having that legislation enacted, I can assure you that it was not an easy task, since we had to overcome determined resistance on the part of those who did not understand its real import, including the "dry" forces. We can say, therefore, that the denatured alcohol law is in substance of our own making. Moreover, we watch carefully the selection of denaturants. There is not one ingredient in denatured alcohol that is not of our own choice, or, at any rate, does not have our approval. In other words, such substances are not chosen at the whim of an official in Washington, but in accordance with formulæ indorsed by chemists of the affected industries. To illustrate the cooperation in this direction which Dr. James M. Doran, the present Commissioner of Prohibition—himself an eminent chemist—extends to science and industry, I am attaching hereto a list of an industrial advisory council appointed by him for the purpose, together with the official formulary sanctioned by that group.

There are several reasons why we should not want to use tax-free pure ethyl alcohol, even if it were available. Can you, as a practical man, visualize the problem of policing our plants and of maintaining morale if we were handling enormous quantities of pure alcohol that could be diverted "as is" to beverage use? In order to prevent lawlessness a Government guard would have to be placed on every mixing tank and our commercial operations would otherwise be hampered to an extent that is unthinkable. As a matter of fact, our processes require those very ingredients that you condemn. These materials are selected, not out of regard for the human stomach, for which they are not intended, but for the reason that they are best suited for the purpose of producing paints, varnishes, and the innumerable other articles of everyday use which can hardly be thought of in connection with beverages. If such materials should be selected from the point of view that you suggest it would result in destroying long-established formulas and generally bring about demoralization in lawful trade circles. That this danger is not chimerical is shown by the serious alarm expressed by all industries that use denatured alcohol. Since this agitation arose great scientific and commercial bodies, such as the National Paint, Oil, and Varnish Association and the American Chemical Society, have made their position altogether clear in support of the Government's policy regarding enforcement of the tax-free denatured alcohol law. Succinctly stated, they are not exercised because the Government requires effective denaturation. That is done in accordance with their own wishes. Their real concern is based on the attempt to hook up denaturization and prohibition. The former is entirely an industrial manufacturing proposition—the latter a great social question. Any attempt to solve the problems of one in terms of the other can not be seriously considered.

Summed up, the scientific and commercial interests with which I am in contact—and they cover all fields—are entirely out of sympathy with the attitude of your association in the above behalf, for the reason that it reflects upon the integrity of a tax-free denatured

alcohol law which was enacted more than two decades ago after years of continuous effort. Perhaps the best presentation of their view is found in the report of the committee on legislation of the National Wholesale Druggists' Association which was unanimously adopted at the annual convention of that organization in Atlanta, Ga., October 1 to 4, 1928:

"It is an astonishing fact that after 20 years of steady progress in the development of the Government's free industrial alcohol policy—a policy which was not adopted until it had been successfully tested in England, France, Germany, and other European countries—attempts should be made in Congress to render this policy ineffective by the imposition of absurd restrictions upon the agents to be employed by the Treasury Department for the purpose of denaturing industrial spirits. A number of bills, notably the Edwards measure, forbidding the use of any poisons or deleterious substances in the denaturation of alcohol, have been presented in both houses, and it is an extraordinary fact that the sponsors of these propositions have been men who heretofore manifested a laudable disposition to protect the legitimate alcohol trades against fanatical attacks. Chiefly for partisan political advantage, a contingent of so-called wets brought forward the slogan—'Take the poison out of denatured alcohol'—and not only endeavored to secure the passage of special measures to this end, but also sought to attach riders to appropriation bills prohibiting the expenditure of any part of the funds allocated to prohibition enforcement in the authorization of any alcohol formula in which a substance 'deleterious to health' should be employed. It goes without saying that to secure the best results and to protect the Government in the enforcement of the policy of the prohibition of the manufacture, sale, and use of all alcoholic beverages, many substances deleterious to health must be employed in some of the 75 formulæ necessary to meet the requirements of the countless industries which employ alcohol as a raw material.

"The allied trades are to be congratulated heartily upon the fact that the congressional leaders have had their eyes opened to the fallacies underlying these attacks on industrial alcohol and that the interested trades have not been required to waste time in attending futile hearings on these ill-advised measures."

A copy of this letter is being sent to Major Curran.

Yours very truly,

H. S. CHATFIELD,
Chairman Industrial Alcohol Committee
National Paint, Oil, and Varnish Association.

Mr. CRAMTON. Mr. Chairman, I am satisfied that any Member of the House who will read the Chatfield letter will be convinced that such action as was proposed in the Linthicum amendment to the Treasury bill last year would be an unnecessary and unwarranted interference with legitimate industry and would be destructive in high degree to great industries in this country and would throw out of employment thousands of men in the very cities represented by those gentlemen who supported that amendment.

Mr. KINDRED. Mr. Chairman, will the gentleman yield?

Mr. CRAMTON. I yield now to the gentleman from New York.

Mr. KINDRED. Mr. Chairman, I very highly appreciate the gentleman's great courtesy in yielding to me at this time. I wish to assure the gentleman and the Members of the House who are interested in this question from a purely medical standpoint that I am not asking questions or approaching the subject from the viewpoint of political partisanship, and to make my assurance doubly sure in that respect I will say that I was not a candidate for reelection to Congress in the last election, and that the presidential and congressional elections are recently over.

Mr. CRAMTON. Permit me to say to the gentleman that our acquaintance with him makes it quite unnecessary for him to give the first assurance and that we regret that the second has come to pass.

Mr. KINDRED. I appreciate very highly the gentleman's kind remarks. Now to get to the point which is in my mind. I do not know that I would vote for the amendment suggested by my friend and colleague [Mr. LINTHICUM] of Maryland, but I favor the objects to be accomplished in denaturing industrial alcohol which the gentleman from Michigan favors, and which Doctor Doran, head of the enforcement department of prohibition of the prohibition law, favors, but there can be brought about a denaturing and the saving of thousands of lives, and I do not wish to make an extravagant statement in this respect. It is impossible to estimate the number of foolhardy people referred to in the letter just read, but notwithstanding that we as physicians know that we have been called upon in many and many a sad case and know that many men and women——

Mr. CRAMTON. May I ask that the gentleman shall propound his question. I do not want to take——

Mr. KINDRED. I am coming to it right now. The point is that industrial alcohol can be denatured by a substance so oderiferous, so repugnant to taste and smell, and which does not and which will not kill poor foolhardy people who will drink denatured alcohol and——

Mr. CRAMTON. Allow me to make a suggestion—I can not yield for a speech, I will for a question. I would like to make this observation, however: If the gentleman and those who agree with him——

The CHAIRMAN. The time of the gentleman has expired.

Mr. CRAMTON. Mr. Chairman, I ask for one additional minute.

The CHAIRMAN. Is there objection? [After a pause.] The Chair hears none.

Mr. KINDRED. The question is——

Mr. CRAMTON. I will have to complete this statement and then I will yield for a question. I suggest that if the gentleman and those who agree with him that it is possible to do this thing differently go to the industries that are affected and who say they would be largely hampered by such a proposition, and if they can gain an agreement with those industries on the subject, then come to Congress and they will not have much trouble.

Mr. KINDRED. Allow me to complete my question. Will the gentleman agree——

Mr. CRAMTON. If the gentleman will allow me time to answer.

Mr. KINDRED. That he would give his influence, and it is very great, and properly so, to recommend that a commission composed of eminent, scientific, unbiased men, not connected with the Government, suggest something in the line of decomposed animal or vegetable substance to be placed in alcohol which will not kill——

Mr. CRAMTON. The letter I have had read comes from a source of the greatest technical ability entirely experienced with the subject, entirely disassociated from any prohibition department of the Government or any other contact with the Government.

Mr. KINDRED. Will the gentleman agree to an unbiased opinion of that kind?

Mr. CRAMTON. I have already put it in the RECORD.

The CHAIRMAN. The time of the gentleman has again expired.

Mr. BYRNS. Mr. Chairman, I yield myself 20 minutes.

Mr. Chairman, it is not my intention to discuss the details of the pending appropriation bill. The gentleman from Indiana [Mr. WOOD], who has charge of the bill, will later on take up the matter in detail and explain the various provisions of the bill. I may later on, and probably will, have something to say relative to certain appropriations when the bill is read for amendment. I want to take the time at my disposal for the purpose of calling attention to a matter relative to the administration of the services of the Government which I think is particularly important at this time.

The estimates so far submitted for the fiscal year 1930 amount to $4,417,369,904.67. This is an increase of $95,220,992.61 over the appropriations which were made at the last session for the fiscal year 1929. It is very certain that these 1930 estimates will be considerably increased. Your committee has been advised that there will be additional supplemental estimates for a number of items, including approximately $12,000,000 for public buildings. The Budget reduced the estimates for tax refunds $15,000,000 below the amount which will actually be required for 1930, with the statement that this sum can be made up at the next session. This is a practice which should not prevail. Whether so intended or not, it is calculated to mislead the people as to the amount of money which is being appropriated. The original or first estimates are given the widest publicity. Supplemental estimates receive little attention. When it is known, therefore, just what sums will be needed during the coming fiscal year there is no justification for holding them back to a later date.

The total cost of Federal, State, and municipal governments approximate $11,000,000,000. The earnings of all the American people last year amounted to over $90,000,000,000. Therefore, about one-eighth of our income is spent for taxes; or, figuring it another way, for every dollar earned in this country about 12 cents is required for taxes. There is no question but that the constantly increasing cost of government is one of the very serious problems with which our Government must deal. Federal appropriations and expenditures are rapidly increasing each year. As a matter of fact, the expenses of every department have increased to a considerable extent every year except one since the fiscal year 1924. The estimated expenditures for the fiscal year 1930 are $4,525,719,647, which includes postal

expenditures. This is $433,820,172.16 more than the expenditures for the fiscal year 1924, and that, too, notwithstanding the fact that more than $300,000,000 less will be required for interest on the public debt. In addition to this there are now on the statute books authorizations amounting to more than $1,000,000,000 for which appropriations will be required within the next few years, and these authorizations will undoubtedly be greatly increased during the present session. Our National Government is already expending vastly more than was ever expended in peace time, and unless some way is found to check or curb these expenditures they will very soon amount to $5,000,000,000 per annum.

And I may say that it may well be questioned whether in the interest of real economy the appropriations for 1930 should not be greatly increased, particularly for public buildings and for flood control. Congress has authorized $265,000,000 for the erection of public buildings here in Washington and elsewhere in the country, and $325,000,000 for the control of the Mississippi floods. Of course, under the bill that was passed by Congress, it is expected to be a continuing program of several years. But I seriously question the economy, after Congress has determined to make the expenditure, of appropriating by piecemeal the amount necessary to complete the work in hand. Public buildings are constructed by contract in various parts of the country. The idea of putting up these buildings is not only to afford convenience to the people who use the mails and to provide facilities for the meetings of our courts, but also to save rent; and since these appropriations will ultimately be made it may well be said that it would result in economy if Congress would go further and make sufficient appropriations and complete these buildings at the earliest possible moment on 3½ or 4 per cent money, rather than continue for a series of years to pay rent amounting to 15, or it may be 20, per cent to the landlords over the country.

The same is true of flood control. We appropriated last year $15,000,000. My recollection is that the Budget calls for $30,000,000 for 1930. Of course, under that program it will take several years to expend the $325,000,000 authorized. This work is being done up and down the Mississippi River by contract, and, even though the Chief of Engineers may say that he has all the money that he can expend, we all well know that since the work is being done by contract, contracts could be let up and down the Mississippi River and the work carried on and completed at an earlier date than is now contemplated. Of course, if no floods occur, it is all right; but we are taking the chance of other floods occurring and hundreds of millions of dollars and thousands of lives lost pending this completion of the program of flood control.

Of course, this would greatly increase the amount carried, and that may have influenced the administration in its estimates, but no one, it seems to me, can deny that it would be good business to complete this work at the earliest time possible, since Congress has determined that this work must be done. As in the case of rivers and harbors, the Government has lost, and is losing, vast sums of money by this piecemeal method of making appropriations for work already determined upon.

Undoubtedly many of these increases are entirely justified. Our Government must and should continue to make adequate and liberal provision for those who have served their country in war. It must continue to safeguard the public health to the fullest extent possible. It must continue to aid in the construction of good roads. It must protect American lives and property at home and abroad. It should provide adequate national defense until an international agreement for disarmament is entered into and which will be carried in good faith by all the contracting nations. What, then, it may be asked, can be done to relieve the taxpayers without impairing the efficiency of the Government or a wise and progressive administration of its affairs?

Waiving the importance of a searching scrutiny of expenditures and the elimination of such expenditures as may be desirable but which are not of vital importance, I think it is clear to those who have studied the present financial operations of our Government that much could be accomplished by coordinating many functions of the various departments, eliminating numerous and expensive duplications, abolishing unnecessary commissions and independent bureaus, and consolidating and combining many of the necessary activities under the responsible head of some one department. This would save a very large overhead in the way of salaries and other expenses and at the same time promote more efficient administration. It has been urged for a number of years without result, and the necessity of such action was sharply drawn to the attention of the public in the recent presidential campaign when the Democratic candidate called attention to these unnecessary expenditures and in the event of his election pledged himself to their elimination in the interest of economy and greater efficiency in government.

During the war many additional commissions and bureaus were created. It was expected that most if not all of them would be abolished at the conclusion of the war. On the contrary, at every session since then new commissions have been created. It seems to be the habit, whenever a troublesome or debatable question is raised, to promise the appointment of a commission to look into it and make a report. These commissions are constantly seeking to extend their powers. They always cost a lot of money, and very few have ever justified their creation. It is not unfair to say that duplications exist in nearly all of the departments. What justification can there be for having air services in four different departments and under four different Secretaries? Why have three commissioners in the United States Compensation Commission at $9,000 per annum, with highly paid secretaries and other resulting overhead expenditures, when the work could be as well and possibly better performed under some bureau chief at a smaller salary and with a less number of employees in some one of the departments of the Government? Why should two bureaus administer the pension laws enacted for the benefit of veterans of our various wars, when all the work could be performed by the Veterans' Bureau, which has hospitals and surgeons at its command and could thus save considerable overhead in salaries and medical and traveling expenses? Why have chemical and other divisions in one department performing work similar to that being done in other departments? Why create a new commission every time new activities are undertaken? There are quite a number of boundary commissions established under treaties with big salaries for the commissioners and large clerical forces and very little to do during the year. Why could not the work of these commissions be established under one commission? Why should not the Bureau of Vocational Education be put under the Bureau of Education in the Interior Department?

I may say that for a number of years, as you gentlemen well know, there has been agitation as to alleged duplication of duties by the consular service and the commercial agents of the Government abroad. I would not do anything to interfere with the splendid work being done by the Department of State and by the Bureau of Foreign and Domestic Commerce abroad, but I wonder if some plan could not be worked out that would bring a coordination of the work now performed by the Consular Service and these representatives of the Department of Commerce, for undoubtedly that work is duplicated in many instances.

These questions could be multiplied. There may be a good reason for the maintenance of some of them but a careful survey should be made in order to determine that fact. Certain it is that a reorganization and consolidation of them could be made at a great saving to the taxpayers, and I believe, at the same time, promote greater efficiency of Government.

There are approximately 55 independent bureaus and commissions. Most of them could be abolished and their functions performed by departments. Of course, that would mean the elimination of many fat jobs but that should not deter those who are interested in serving the taxpayers.

There has been no effective reorganization since the World War. The necessity for such reorganization was recognized by everyone at the beginning of Mr. Harding's administration. Congress created a joint committee of the Senate and House to make a survey and report a plan of reorganization. It is a matter with which Congress should deal because legislation created these agencies and legislation will be required to abolish or consolidate them. Subsequently the President insisted that he should be allowed to appoint the chairman of the joint committee, and Congress reluctantly permitted this to be done and he appointed a citizen of Ohio at a salary of $7,500 per annum. We thus had the anomaly of an appointee of the President serving as chairman of a joint committee of Congress.

I do not think it too much to say that the chairman of that joint committee really controlled the investigation that was made, and to that fact may be due in some measure the total failure of anything being done. Although much time was consumed and at considerable expense, nothing was accomplished save a report to Congress which was not even considered, and this, too, notwithstanding the assertion of Mr. REAVIS, a distinguished member of the committee, that a real, effective reorganization would have resulted in a saving of $300,000,000 per annum. There has been nothing done since then save a transfer of the Patent Bureau and the Bureau of Mines from the Interior Department to the Department of Commerce. These two bureaus are now costing over $1,000,000 more than they were costing at the time of the transfer.

I have introduced a joint resolution providing for a joint committee of the Senate and the House to be appointed by the President of the Senate and the Speaker of the House, respectively, to make a survey of the administrative services of the Government and report to Congress, together with its recommendations, and to prepare and submit bills and resolutions having for their purpose the coordination of Government functions and their most effiicent economical conduct. It is similar in text to the resolution which was adopted at the beginning of Mr. Harding's administration. I hope that some such resolution will be adopted at this session of Congress. This is not a partisan question and I am sure that I can pledge to the Republican majority in the Congress the cordial cooperation and support of every Democratic Member in any effort that may be made to bring about such reorganization as will promote greater efficiency and economy in the administration of our Nation's business.

And I may say that now, it seems to me, is the most important and really necessary time to take this up. The President elect enjoys a very wide reputation throughout the country as a great organizer and splendid business man, and I can not believe but that he would heartily approve any efforts that might be made by Congress along this line. It seems to me now that within three months from the time he takes control of the administration of the affairs of our Government Congress should by some such method as I have outlined secure the facts by a careful survey and pass the necessary legislation to save the great amount of money that I am confident can be saved in the expenditures made by the Government and at the same time bring about a better administration and greater efficiency in the conduct of the Government.

Mr. ARENTZ. Mr. Chairman, will the gentleman yield?

Mr. BYRNS. Certainly.

Mr. ARENTZ. Has the gentleman given any thought to the remarks or statement made by the President relative to a coordination of the legal employees in the several departments under one head?

Mr. BYRNS. The gentleman means in the President's message the other day?

Mr. ARENTZ. Yes; in the President's message.

Mr. BYRNS. Yes. I noted that the President recommended something along that line. He also referred, as the gentleman will recall, to the possible consolidation or coordination of these bureaus having to do with payment of pensions to the veterans of our wars.

The remarks I have made are along that line. Of course, I think we ought to go further than the President suggested in his message. I think we ought to take up the whole administrative service of the Government in all of its departments and abolish many of these commissions and bureaus, and I have only referred to a few of them. Of course, I could have gone into greater detail if it had been necessary.

Mr. ARENTZ. I should oppose the move contemplated by the President, because if all of these legal activities were centered in one head—the Attorney General—your constituent and mine would have no appeal.

The CHAIRMAN. The time of the gentleman from Tennessee has expired.

Mr. BYRNS. I will take five additional minutes.

Mr. ARENTZ. But when it comes to an ordinary and simple proposition in one of the bureaus, the bureau has its chief counsel, and the chief counsel takes up things with which he is definitely acquainted.

Take the General Land Office. The chief counsel in that office knows everything pertaining to public lands, but if you should center all of these things in the Attorney General's office your constituent and mine, instead of going to the counsel of the General Land Office, before the matter had even been placed in the hands of the Secretary of the Interior or he had placed it in the hands of the Attorney General, would have to go to the Attorney General's office and there would be absolutely no appeal. Your constituent or my constituent would have to go to the Attorney General and there would be no man above him, so that instead of having a chance to appeal two or three times on the way up he would have his hands tied.

Mr. BYRNS. The gentleman's remarks simply serve to emphasize the importance of the appointment of a joint committee to make the survey I have suggested and make a report to Congress. The gentleman differs with the President in regard to the consolidation of the legal services, as I understand it, but the whole point I have been trying to make here is not to even suggest what in my own mind might be a proper consolidation or coordination but that a joint committee should be appointed to make a survey, so that Congress can act intelligently.

Mr. ARENTZ. A joint committee of the House and Senate?

Mr. BYRNS. Yes.

Mr. ARENTZ. A joint committee composed of men who know the problems that confront them daily?

Mr. BYRNS. Precisely, and I will say without hesitation that such a joint committee ought to be composed only of Members of the Senate and House and they ought to be given the fullest latitude in making an investigation of all these departments and commissions so that the Congress may act intelligently on the matter.

Mr. ARENTZ. I am in full accord with the gentleman.

Mr. O'CONNELL. Will the gentleman yield?

Mr. BYRNS. Yes.

Mr. O'CONNELL. The gentleman would not want the President to appoint the chairman of the commission again?

Mr. BYRNS. No; and, as I have said, I think it was a mistake to permit him to appoint the chairman of that joint committee eight years ago. As I sought to explain, this is a matter with which Congress should deal, because these commissions and these independent bureaus have been created by law, and legislation will be required either to abolish them or consolidate them.

Mr. O'CONNELL. Through Congress?

Mr. BYRNS. Undoubtedly through Congress.

Mr. GARRETT of Tennessee. Will the gentleman yield?

Mr. BYRNS. Yes.

Mr. GARRETT of Tennessee. The act, I think, of the executive branch of the Government in requesting and obtaining the authority to appoint the gentleman who became chairman of that committee had much to do, especially when coupled with the further fact that that chairman really dominated the committee, with preventing the consideration of the legislation that was suggested, though there were some other things in it. For instance, they went beyond the real intent, I think, of the House and recommended a new department. That was one thing which threw a damper over the matter, certainly as far as I was personally concerned. But I want to ask the gentleman a question, and that is if he is committed directly to the policy of a joint committee? My observation has been that joint committees appointed for legislative purposes as a rule have not been as successful in bringing about legislation as has been the case where each body has proceeded independently and erected its own committee. I am not expressing now any opinion of my own upon the subject, but I was wondering whether the gentleman thinks a joint committee would be better than to have each body erect its own committee.

Mr. BYRNS. I agree with the gentleman, and perhaps if I had followed my own personal inclination I would have prepared my resolution simply for a House committee; but as I have just said, legislation will be required to put through any recommendations that such a committee might make, and I thought, in view of the fact that the Senate is a joint legislative body with the House, that any report which may be made would more likely receive consideration by both Houses of Congress if both are represented on the committee.

The CHAIRMAN. The time of the gentleman from Tennessee has again expired.

Mr. BYRNS. Mr. Chairman, I will take five additional minutes.

Mr. GARRETT of Tennessee. Theoretically, of course, a joint committee is in the interest of expedition, yet practically my observation has been it has not always expedited. However, I should not have any opposition to a joint committee.

Mr. BYRNS. The resolution which I have introduced will go before the committee of which the gentleman is a member, I take it, the Committee on Rules, and I have no particular pride in the resolution. What I am anxious about is to see something done along the line I have indicated, and if the committee, after consideration, should feel that it was entirely proper and more likely to bring about quick and satisfactory results to confine it to a committee of the House, of course I would accept the amendment.

Mr. GIFFORD. Will the gentleman yield?

Mr. BYRNS. Yes.

Mr. GIFFORD. Having observed the working out of the consolidation of State departments, I would not like for the gentleman to emphasize too strongly the losing of fat jobs. Does not the gentleman realize that when separate commissions are taken into a larger department they always "cover in" the positions of the men in charge, and always increase the salary of the man at the head of the consolidated department, and in the end there is no saving of money; and in addition there is very great danger sometimes of taking away the initiative of an independent organization by putting it under the control of a larger department. I sympathize with the gentleman's attitude

with reference to the Consular Service and the trade commissioners and such things where there is duplication of effort, but does the gentleman think that the fat jobs would be eliminated and that greater initiative effort would be the result?

Mr. BYRNS. I think they would undoubtedly be eliminated if Congress considered the interests of the taxpayer rather than those who hold the positions. Of course, if the positions were continued or if salaries of the heads of the departments or bureaus were increased thereby it would be the responsibility of Congress and Congress alone.

Mr. KINDRED. Will the gentleman yield?

Mr. BYRNS. Yes.

Mr. KINDRED. In approximately the middle of the gentleman's speech I did not clearly understand whether he meant to recommend or suggest the abolition of any considerable existing medical agency and the substitution therefor of some other existing medical agency.

Mr. BYRNS. No; I endeavored to make it plain that I was not making any recommendation. I was simply referring to a few of the matters that might be regarded as proper subjects for the consideration of the proposed joint committee.

Personally, I will say to the gentleman I think the Pension Bureau ought to be put under the Veterans' Bureau. I can not see any reason why we should continue to have a Pension Bureau and a Veterans' Bureau. The Veterans' Bureau is supplied with hospitals, it is supplied with surgeons and medical services, and it seems to me that a great deal of money could be saved without affecting in any way the interests of any of the veterans of any of our wars by putting them under one head. This, of course, would do away with the medical division of the Pension Bureau, but I will submit to the gentleman that if this could be done in the interest of economy and with the same amount of efficiency and justice to the soldier it ought to be done.

Mr. KINDRED. I am in agreement with the gentleman's suggestion and I want to emphasize that the Public Health Service, which is one of the most efficient and industrious medical agencies that the Government has ever provided, is capable of taking care of a great deal that is now subdivided in the manner the gentleman has spoken of.

Mr. BYRNS. I do not yield to any gentleman on the floor in so far as my admiration of the Public Health Service is concerned. I have always stood for the most liberal appropriations for that great service and I would not want to see anything done that would disturb its work.

Mr. KINDRED. And I hope for an enlargement of its sphere of influence.

Mr. BYRNS. I join the gentleman in that hope. [Applause.]

The CHAIRMAN. The time of the gentleman from Tennessee has expired.

Mr. WOOD. Mr. Chairman, I yield 15 minutes to the gentleman from Pennsylvania [Mr. KELLY].

Mr. KELLY. Mr. Chairman and gentlemen of the committee, there is romance in the history of the United States Postal Service. Its history is the record of the development of transportation in this country. And in all its annals since Benjamin Franklin guided its destinies, there has been no more marvelous development than that of the air mail service.

The comparatively small amount spent in this activity has been well spent. It has resulted in building up the aircraft industry and in furnishing a reservoir of men and materials for the aviation development which is vital to any nation.

The contract air mail service, if it had no other achievement than the training of Col. Charles Lindbergh to its credit, would be fully justified. He was a contract air-mail flyer and was on leave of absence when he made his trans-Atlantic flight.

I want to review the history of this remarkable service. It is little more than 10 years ago when the first mail plane started on the flight from Washington to New York. It was an inauspicious beginning, for the pilot lost his way and was forced to land without completing the trip.

The Post Office Department continued its pioneer work, and the air mail was a Government operation until the enactment of the contract air mail law of 1925, of which I was the author. The original act was as follows:

[Public—No. 359—68th Cong.]

An act (H. R. 7064) to encourage commercial aviation and to authorize the Postmaster General to contract for air mail service

Be it enacted, etc., That this act may be cited as the air mail act.

SEC. 2. That when used in this act the term "air mail" means first-class mail prepaid at the rates of postage herein prescribed.

SEC. 3. That the rates of postage on air mail shall be not less than 10 cents for each ounce or fraction thereof.

SEC. 4. That the Postmaster General is authorized to contract with any individual, firm, or corporation for the transportation of air mail by aircraft between such points as he may designate at a rate not to exceed four-fifths of the revenues derived from such air mail, and to further contract for the transportation by aircraft of first-class mail other than air mail at a rate not to exceed four-fifths of the revenues derived from such first-class mail.

SEC. 5. That the Postmaster General may make such rules, regulations, and orders as may be necessary to carry out the provisions of this act: *Provided*, That nothing in this act shall be construed to interfere with the postage charged or to be charged on Government-operated air mail routes.

Approved, February 2, 1925.

This act provided that payment to contractors should not exceed four-fifths of the revenues. After a number of contracts had been let, it was found through experience, that such a method of payment delayed the air mail, since each piece of mail matter must be examined in order to determine the revenue.

This was corrected by an amendment which was passed in 1926. It was as follows:

[Public—No. 331—69th Cong.]

An act (H. R. 11841), to amend section 4 of the air mail act of February 2, 1925, so as to enable the Postmaster General to make contracts for the transmission of mail by aircraft at fixed rates per pound

Be it enacted, etc., That section 4 of the air mail act of February 2, 1925, is amended to read as follows:

"That the Postmaster General is authorized to contract with any individual, firm, or corporation for the transportation of air mail by aircraft between such points as he may designate, and to further contract for the transportation by aircraft of first-class mail other than air mail at fixed rates per pound, including equipment, under such rates, rules, and regulations as he may prescribe, not exceeding $3 per pound for air mail for the first 1,000 miles, and not to exceed 30 cents per pound additional for each additional 100 miles or fractional part thereof for routes in excess of 1,000 miles in length, and not exceeding 60 cents per pound for first-class mail other than air mail for the first 1,000 miles, and not to exceed 6 cents per pound additional for each additional 100 miles or fractional part thereof for routes in excess of 1,000 miles in length. Existing contracts may be amended by the written consent of the contractor and the Postmaster General to provide for a fixed rate per pound, including equipment, said rate to be determined by multiplying the rate hereinabove provided by a fraction, the numerator of which is the per cent of revenues derived from air mail to which the contractor was previously entitled under the contract, and the denominator of which is 80."

Approved, June 3, 1926.

Under this method of payment the air mail advanced rapidly and many contracts were let. All the rest of the world was outdistanced in the transportation of mail by aircraft.

Still there were handicaps. The law provided that the rate should not be less than 10 cents an ounce and the Post Office Department fixed the rate at 10 cents a half ounce or 20 cents an ounce. This reduced the volume, and many planes carried far less than capacity loads. The expense was practically the same as though the planes were filled.

A lower rate was the obvious way to increase volume. At the same time this would reduce revenues and in certain contracts mean that too high compensation would be paid contractors.

These two points were met in a bill I introduced in the last session and which was enacted into law. It was as follows:

[Public—No. 410—70th Cong.]

An act (H. R. 8337) to amend the air mail act of February 2, 1925, as amended by the act of June 3, 1926

Be it enacted, etc., That section 3 of the air mail act of February 2, 1925 (U. S. C., title 39, sec. 463), as amended by the act of June 3, 1926, is hereby amended to read as follows:

"SEC. 3. That the rates of postage on air mail shall not be less than 5 cents for each ounce or fraction thereof."

SEC. 2. That after section 5 of said act (U. S. C., title 39, sec. 465) a new section shall be added as follows:

"SEC. 6. That the Postmaster General may by negotiation with an air-mail contractor who has satisfactorily operated under the authority of this act for a period of two years or more, arrange, with the consent of the surety for the contractor and the continuation of the obligation of the surety during the existence or life of the certificate provided for hereinafter, for the surrender of the contract and the substitution therefor of an air mail route certificate, which shall be issued by the Postmaster General in the name of such air-mail contractor, and which shall provide that the holder shall have the right of carriage of air mail over the route set out in the certificate so long as he complies with such rules, regulations, and orders as shall from time to time be issued by the Postmaster General for meeting the needs of the Postal Service and adjusting air mail operations to the advances in the art of flying: *Provided*, That such certificate shall be for a

period not exceeding 10 years from the beginning of carrying mail under the contract. Said certificate may be canceled at any time for willful neglect on the part of the holder to carry out such rules, regulations, or orders; notice of such intended cancellation to be given in writing by the Postmaster General and 60 days provided to the holder in which to answer such written notice of the Postmaster General. The rate of compensation to the holder of such an air mail route certificate shall be determined by periodical negotiation between the certificate holder and the Postmaster General, but shall never exceed the rate of compensation provided for in the original contract of the air mail route certificate holder."

Approved, May 17, 1928.

Some 30 contracts have been entered into, as follows:

ROUTES IN OPERATION OR CONTRACTED FOR

CAM–1: Boston, Mass., via Hartford, Conn., to New York, N. Y., and return; 192 miles each way. Contract awarded October 7, 1925, to Colonial Air Transport (Inc.), 270 Madison Avenue, New York, N. Y., at $3 a pound; service commenced July 1, 1926.

CAM–2: Chicago, Ill., via Peoria and Springfield, Ill., to St. Louis, Mo., and return; 278 miles each way. Contract awarded October 7, 1925, to Robertson Aircraft Corporation, Anglum, Mo., at $2.53125 a pound; service commenced April 15, 1926.

CAM–3: Chicago, Ill., via Moline, Ill., St. Joseph and Kansas City, Mo., Wichita, Kans., Ponca City, Tulsa, and Oklahoma City, Okla., to Fort Worth and Dallas, Tex., and return; 1,059 miles each way. Contract awarded October 7, 1925, to National Air Transport (Inc.), 5936 South Cicero Avenue, Chicago, Ill., at $3 a pound; service commenced May 12, 1926.

CAM–4: Salt Lake City, Utah, via Las Vegas, Nev., to Los Angeles, Calif., and return; 600 miles each way. Contract awarded October 7, 1925, to Western Air Express (Inc.), 117 West Ninth Street, Los Angeles, Calif., at $3 a pound; service commenced April 17, 1926.

CAM–5: Salt Lake City, Utah, via Boise, Idaho, to Pasco, Wash., and return; 530 miles each way. Contract awarded October 7, 1925, to Walter T. Varney, P. O. box 722, Boise, Idaho, at $3 a pound; service commenced April 6, 1926.

CAM–8: Seattle, Wash., via Tacoma and Vancouver, Wash., Portland and Medford, Oreg., San Francisco, Fresno, and Bakersfield, Calif., to Los Angeles, Calif., and return; 1,099 miles each way. Contract awarded December 31, 1925, to Pacific Air Transport (Inc.), 593 Market Street, San Francisco, Calif., at $2.8125 a pound for 1,000 miles or less and $3.09375 a pound from 1,001 to 1,100 miles; service commenced September 15, 1926.

CAM–9: Chicago, Ill., via Milwaukee, Madison, and La Crosse, Wis., to St. Paul and Minneapolis, Minn., and return; 383 miles each way. Contract awarded September 7, 1926, to Northwest Airways (Inc.), St. Paul, Minn., at $2.75 a pound; service commenced June 7, 1926.

CAM–11: Cleveland, Ohio, via Youngstown, Ohio, and McKeesport, Pa., to Pittsburgh, Pa., and return; 123 miles each way. Contract awarded March 27, 1926, to Clifford Ball, 407 Market Street, McKeesport, Pa., at $3 a pound; service commenced April 21, 1927.

CAM–12: Cheyenne, Wyo., via Denver and Colorado Springs, Colo., to Pueblo, Colo., and return; 199 miles each way. Contract awarded October 4, 1927, to Western Air Express (Inc.), 117 West Ninth Street, Los Angeles, Calif., at $0.83 a pound; service commenced May 31, 1926.

CAM–16: Cleveland, via Akron, Columbus, Dayton, and Cincinnati, Ohio, to Louisville, Ky., and return; 339 miles each way. Contract awarded October 10, 1927, to Continental Air Lines (Inc.), Cincinnati, Ohio, at $1.22 a pound; service commenced August 1, 1926.

CAM–17: New York, N. Y., via Cleveland and Toledo, Ohio (Detroit, Mich.), to Chicago, Ill., and return; 772 miles each way. Contract awarded April 2, 1927, to National Air Transport (Inc.), 5936 South Cicero Avenue, Chicago, Ill., at $1.24 up to 1,500 pounds, then sliding scale; service commenced September 1, 1927.

CAM–18: Chicago, Ill., via Cedar Rapids, Iowa City, and Des Moines, Iowa; Lincoln and North Platte, Nebr.; Cheyenne and Rock Springs, Wyo.; Salt Lake City, Utah; Elko and Reno, Nev.; and Sacramento to San Francisco, Calif., and return; 1,918 miles each way. Contract awarded January 29, 1927, to Boeing Air Transport (Inc.), Georgetown Station, Seattle, Wash., at $1.50 a pound up to 1,000 miles; service commenced July 1, 1927.

CAM–19: New York, N. Y., via Philadelphia, Pa.; Washington, D. C.; Richmond, Va.; Greensboro, N. C., and Spartanburg, S. C., to Atlanta, Ga., and return; 763 miles each way. Contract awarded February 28, 1927, to Pitcairn Aviation (Inc.), Land Title Building, Philadelphia, Pa., at $3 a pound; service commenced May 1, 1928.

CAM–20: Albany, N. Y., via Schenectady, Utica, Syracuse, Rochester, Buffalo, N. Y., to Cleveland, Ohio, and return; 443 miles each way. Contract awarded July 27, 1927, to Colonial Western Airways (Inc.), 270 Madison Avenue, New York, N. Y., at $1.11 a pound; service commenced December 17, 1927.

CAM–21: Dallas, via Fort Worth, Waco, and Houston, to Galveston, Tex., and return; 320 miles each way. Contract awarded August 17, 1927, to Texas Air Transport (Inc.), Fort Worth, Tex., at $2.89 a pound; service commenced February 6, 1928.

CAM–22: Dallas, via Fort Worth, Waco, Austin, to San Antonio, Tex. (and Laredo, Tex.), and return; 417 miles each way. Contract awarded August 17, 1927, to Texas Air Transport (Inc.), Fort Worth, Tex., at $2.89 a pound; service commenced February 6, 1928.

CAM–23: Atlanta, Ga., via Birmingham and Mobile, Ala., to New Orleans, La., and return; 479 miles each way. Contract awarded August 19, 1927, to St. Tammany Gulf Coast Airways (Inc.), Roosevelt Hotel, New Orleans, La., at $1.75 a pound; service commenced May 1, 1928.

CAM–24: Chicago, Ill., via Indianapolis, Ind., to Cincinnati, Ohio, and return; 270 miles each way. Contract awarded November 15, 1927, to Embry-Riddle Co., Lunken Airport, Cincinnati, Ohio, at $1.47 a pound; service commenced December 17, 1927.

CAM–25: Atlanta, Ga., via Jacksonville, to Miami, Fla., and return; 622 miles each way. Contract awarded November 23, 1927, to Pitcairn Aviation (Inc.), Land Title Building, Philadelphia, Pa., at $1.46 a pound; service to start December 1, 1928.

CAM–26: Great Falls, via Helena and Butte, Mont., Pocatello, Idaho, and Ogden, Utah, to Salt Lake City, Utah, and return; 493 miles each way. Contract awarded December 30, 1927, to National Parks Airways (Inc.), Salt Lake City, Utah, at $2.475 a pound; service commenced June 30, 1928.

CAM–27: Bay City, via Saginaw, Flint, and Lansing, to Kalamazoo, Mich.; Detroit, Pontiac, via Ann Arbor, Jackson, Battle Creek, to Kalamazoo, Mich.; Muskegon, via Grand Rapids, to Kalamazoo, Mich.; and from Kalamazoo, Mich., via South Bend and La Porte, Ind., to Chicago, Ill., and return; 534 miles each way. Contract awarded May 4, 1928, to Thompson Aeronautical Corporation, First National Bank Building, Kalamazoo, Mich., at $0.89 a pound; service commenced July 17, 1928.

CAM–28: St. Louis, via Kansas City, Mo., to Omaha, Nebr., and return; 395 miles each way. Contract awarded May 9, 1928, to Robertson Aircraft Corporation, Anglum, Mo., at $0.785 a pound.

CAM–29: New Orleans, La., via Houston, to either San Antonio, Laredo, or Brownsville, Tex., and return; 550 miles each way. Contract awarded August 2, 1928, to St. Tammany Gulf Coast Airways (Inc.), Roosevelt Hotel, New Orleans, La., at $1 a pound.

CAM–30: Chicago, Ill., via Champaign, Ill.; Terre Haute and Evansville, Ind.; Nashville and Chattanooga, Tenn., to Atlanta, Ga., and return, with a spur line Evansville, Ind., to St. Louis, Mo., and return; 790 miles each way. Contract awarded October 16, 1928, to Insterstate Air Lines (Inc.), 105 West Adams Street, Chicago, Ill., at $0.75 a pound; service to start November 19, 1928, from Chicago to Evansville, and December 1, 1928, all the way through.

Mr. LAGUARDIA. Mr. Chairman, will the gentleman yield?

Mr. KELLY. Certainly.

Mr. LAGUARDIA. The gentleman will recall that in the last session we had a bill under consideration one Consent Day permitting the Postmaster General to extend the life of the contract from 2 to 10 years.

Mr. KELLY. That is the bill enacted into law during the last session.

Mr. LAGUARDIA. Is it not true that some of these contracts made in the early days, at a time when equipment was much more costly than it is now, and when we had no experience, may be renewed to the advantage of these contractors instead of obtaining the advantage for the Government of the reduced cost of operation?

Mr. KELLY. No. There is complete protection. The contract will not be extended except at the lower rate desired by the Post Office Department.

Mr. LAGUARDIA. Then the Government is fully protected?

Mr. KELLY. Absolutely. The purpose of the bill was to make sure that the contract is not extended unless at the lower rate, justified by the increased volume.

Mr. WOOD. It might also be stated further that under the law and the regulations for carrying the air mail the Postmaster General has the right to call the contractors in and reduce these prices whenever he desires, and that is going to be done very soon.

Mr. KELLY. The purpose of that legislation was to protect the Government when we reduced the rate and increased the volume. The rates went into force on the 1st of August, 1928. Although August is usually a very dull month, the volume jumped 100 per cent.

Mr. LAGUARDIA. Is the Government in any way tied up permanently with any railroads in a contract for carrying the mail? In other words, as this new means of transportation develops, a greater volume of mail will be carried through the air, and all of the mail may even be transferred from the railroads to the air.

Mr. KELLY. There is no permanent contract at all with the railroads. The Postmaster General has authority to take

all of the mail off one road and put it on another, or take it off the roads and put it in the airplanes.

Of course, the Federal Government has assisted greatly in the establishment of lighted airways, which are of value to every aviation company, whether carrying mail or not. They serve commerce just as the lighthouses serve ocean transportation.

Mr. ROBSION of Kentucky. If the gentleman will permit this observation, I wonder if we put as much into the air mail service as in the railroads of the country in the way of grants of land, and so forth.

Mr. KELLY. No; nothing to compare with the aid given railroad transportation.

Mr. KADING. If the gentleman will yield for a short question, I would like to ask if the money expended on landing lights for airplanes is done at the expense of the Government or by private parties.

Mr. KELLY. Both. Many municipalities have expended large sums in equipping landing fields with lights and other necessary equipment. The aviation companies, in some instances, have lighted airways. Then the Government, through the Department of Commerce, has done a great service in lighting airways. Through cooperation great progress has been made. Night flying is essential to the realization of full value from the carriage of mail by aircraft.

Now, Mr. Chairman, I am sure many persons will be interested in the exact terms of the contract under which the contract air mail service operates. Here is the contract under which the air mail is now being carried between Chicago and San Francisco:

CONTRACT FOR AIR MAIL SERVICE

(Route No. CAM–18)

Contractor's address: Boeing Airplane Co. (Inc.) and Edward Hubbard, Seattle, Wash.

Route: Chicago, Ill., via Iowa City and Des Moines, Iowa, Omaha and North Platte, Nebr., Cheyenne and Rock Springs, Wyo., Salt Lake City, Utah, Elko and Reno, Nev., and Sacramento, Calif., to San Francisco, Calif., and return.

Rate of pay: $1.50 per pound for the first 1,000 miles and 15 cents per pound for each additional 100 miles.

This article of contract, made the 29th day of January, 1927, between the United States of America (acting in this behalf by the Postmaster General) and Boeing Airplane Co. (Inc.) and Edward Hubbard, contractor.

Witnesseth that whereas Boeing Airplane Co. (Inc.) and Edward Hubbard has been accepted according to law as contractor for transporting the mails on route No. CAM–18, from Chicago, Ill., via the points specified above, to San Francisco, Calif., and return under an advertisement issued by the Postmaster General on November 15, 1926, for such service, which advertisement is hereby referred to and made by such reference a part of this contract, at the rate of $1.50 per pound for the first 1,000 miles and 15 cents per pound for each additional 100 miles, for a period not exceeding four years from the starting date specified in order of Postmaster General, which date shall not be later than six months after award of this contract.

Now, therefore, the said contractor undertakes, covenants, and agrees with the United States of America—

First. To carry the mails offered with due celerity, certainty, and security, and in safe and suitable aircraft on the route described and on the schedule set forth by the Postmaster General, the contractor to receive and deliver the mails at the designated fields and point on said fields as approved by the Postmaster General.

Second. To carry said mails in a safe and secure manner, free from wet or other injury.

Third. To be accountable and answerable in damages for the person to whom the contractor shall commit the care and transportation of the mails and his faithful performance of the obligations assumed herein and those imposed by law; not to commit the care or transportation of the mails to any person under 16 years of age, nor to any person undergoing a sentence of imprisonment at hard labor imposed by a court having criminal jurisdiction, nor to any person not authorized by law to be concerned in contracts for carrying the mails.

Fourth. For which service when performed and evidence thereof shall have been filed with the Postmaster General, the said contractor is to be paid by the United States at the rate specified above, payments to be made monthly and as soon after the close of each month as accounts can be adjusted and settled, said pay to be subject, however, to be reduced or discontinued by the Postmaster General as hereinafter stipulated or to be suspended in case of delinquency.

Fifth. It is hereby also stipulated and agreed that deductions in pay will be made for suffering the mails to become wet, injured, or destroyed, or when a grade of service is rendered inferior to that stipulated in the contract, or for the loss of or depredation upon the mails in the custody of the contractor or his agent, provided the loss is occasioned by their fault.

Sixth. It is hereby further stipulated and agreed by the contractor that the Postmaster General may annul the contract or impose forfeitures, in his discretion, for repeated failures or for failure to perform service according to contract; for violating the Postal Laws and Regulations; for subletting service without the consent of the Postmaster General, or assigning or transferring the contract; for combining to prevent others from bidding for the performance of Postal Service, and such annulment shall not impair the right of the department to claim damages from the contractor and his sureties.

Seventh. It is hereby further stipulated and agreed that this contract may be terminated whenever, in the judgment of the Postmaster General, the interests of the Postal Service shall so require, upon serving notice upon the contractor at least one year prior to such termination: *Provided*, That in case of such discontinuance of service, as a full indemnity to the contractor, one month's extra pay, based on the average pay for the preceding six months' period, or full period of service if less than six months, shall be allowed.

Eighth. It is hereby further stipulated and agreed that no Member of or Delegate to Congress shall be admitted to any share of part of this contract or agreement, or any benefit to arise therefrom.

Ninth. That at any time during the continuance of this contract the Postmaster General may require new or additional sureties upon the bond hereto annexed, if, in his opinion, such sureties are necessary for the proper protection of the interests of the United States; and that the contractor shall furnish such sureties to the satisfaction of the Postmaster General within 10 days after notice so to do; and in default thereof this contract may be annulled, at the option of the Postmaster General.

Tenth. The contractor expressly warrants that he has employed no third person to solicit or obtain this contract in his behalf or to cause or procure the same to be obtained upon compensation in any way contingent, in whole or in part, upon such procurement; and that he has not paid or promised or agreed to pay to any third person, in consideration of such procurement or in compensation for service in connection therewith, any brokerage, commission, or percentage upon the amount receivable by him hereunder, and that he has not, in estimating the contract price demanded by him, included any sum by reason of any such brokerage, commission, or percentage, and that all money payable to him hereunder is free from obligation to any other person for services rendered, or supposed to have been rendered, in the procurement of this contract. He further agrees that any breach of this warranty shall constitute adequate cause for the annulment of this contract by the United States, and that the United States may retain to its own use from any sums due or to become due thereunder an amount equal to any brokerage, commission, or percentage so paid, or agreed to be paid.

Eleventh. It is hereby further stipulated and agreed by the contractor that this contract is subject to all the conditions imposed by law and by the several acts of Congress relating to post offices and post roads, and the conditions stated in the advertisement pursuant to which this contract is made.

Twelfth. It is hereby further stipulated and agreed that this contract may, in the discretion of the Postmaster General, be continued in force beyond its express terms for a period not exceeding six months until a new contract with the same or other contractors shall be made by the Postmaster General.

Thirteenth. In view of the fact that the payment of the contractor includes the weight of the equipment as well as the mail it is stipulated and agreed the department will not pay for the transportation over this route of any intercompany mail addressed to the contractor or his agents and pertaining to company business, nor will the department pay for any parcels carried over this route consigned to or for the use of the contractor.

Fourteenth. It is hereby further stipulated and agreed that the distances for purposes of computation of payment to the contractor shall be considered as from center of city to center of city (designated as stops on the route) in an air line.

Fifteenth. It is hereby further stipulated and agreed that whenever an existing stop is discontinued or an additional stop added, in accordance with the provisions as set forth in this contract, the distance over the route will be restated and payment for the units of 100 miles or fraction thereof in addition to the first 1,000 miles will be made on the same basis as before. Where the distance formerly was less than 1,000 miles, the rate for each hundred miles or fraction thereof in excess of 1,000 miles under the restatement shall be in the same ratio as the original bid was to the maximum allowed by law.

Sixteenth. It is hereby further stipulated and agreed that the mail compartment of planes used in the transportation of mail, designated as such by the Post Office Department, must meet with the approval of the Postmaster General in so far as location, size, and construction are concerned.

In witness whereof the Postmaster General has executed this contract in behalf of the United States and caused the seal of the Post Office Department to be affixed thereto, and the said contractor has hereunto set his hand and seal. The typewritten changes in the form of advertisement were made before this contract was signed.

Signed, sealed, and delivered in behalf of the United States this —— day of ——, 1927.

UNITED STATES OF AMERICA,
By ——— ———,
Postmaster General.

Signed this — day of ———, 1927.

——— ———,
Contractor.

CERTIFICATE OF OATH BY THE CONTRACTOR

(Required by law)

I, the undersigned, being employed in the care, custody, and conveyance of the mail as contractor on the route named in the foregoing contract, do solemnly swear ——— that I will faithfully perform all duties required of me, and abstain from everything forbidden by the laws in relation to the establishment of post offices and post roads within the United States; and that I will honestly and truly account for and pay over any money belonging to the said United States which may come into my possession or control.

And I also further swear ——— that I will support the Constitution of the United States: So help me God.

——— ———, *Contractor.*

Sworn before the subscriber, a ———, State of ———, this — day of ———, 1927, and I also certify that the person named is not a postmaster, assistant postmaster, or a clerk employed in a post office, nor a member of the immediate family of a postmaster or assistant postmaster, and is to the best of my knowledge and belief above the age of 21 years.

——— ———.

Approved as to fact:

——— ———,
Second Assistant Postmaster General.

Approved as to form:

——— ———, *Solicitor.*

Mr. Chairman, several other routes are in prospect and planes will be flying over them within a few months.

The practice in establishing routes is to act upon petitions from postmasters of terminal cities, stating the possible air mail between the points. The department then studies these possibilities and whether or not the schedule will afford sufficient advantage over existing means of transportation to warrant establishment.

If it is believed that the route is justified, bids are advertised for and contract is awarded. Already 80 per cent of the population is in the air-mail territory.

All air mail traveling over contract lines enjoys these privileges: Insurance, registry, special delivery, and collect on delivery.

Now, the present situation as to air-mail service brings to light some facts which will be of value in judging the future. The record shows the growth as follows:

	Pounds
October, 1926	42,070
October, 1927	153,659
October, 1928	467,422

That seems an astounding development yet it is but the beginning. At the rate for October, 1928, it means that about 5,600,000 pounds are carried in a year. The total weight of letter mail, excluding local letters, post cards, and so forth, is 343,000,000 pounds a year.

In other words, we are carrying at present by aircraft about 1 pound in every 60. It is not an exaggerated statement to say that we shall ultimately carry 1 pound in 10 by this speediest of all methods of transportation.

That means that we shall be carrying 34,000,000 pounds a year or almost 3,000,000 pounds a month. It will be six times the volume carried at present.

Let us look at revenues and expenditures. There are about 40 letters to the pound, which at 5 cents per letter means revenues of $2 per pound.

Our problem is to get the average cost within $2 a pound. At present the contract rate ranges from 75 cents to $3 a pound. The 467,422 pounds carried during October meant payments to contractors of $915,837, or less than $2 per pound. However, weight of equipment is included in the total weight.

Under the act passed in the last session which made the rate 5 cents per ounce it was also provided that readjustments should be made in the rates paid contractors and that the contracts might be extended to a total period of 10 years.

The Post Office Department and the contractors are planning conferences as soon as it is possible to predict the volume of air mail. There will be decrease in the rates paid and it is proposed that the revenues shall meet all expenditures.

Certainly, as the volume approaches the 1 pound in 10 ratio, the revenues will become greater in proportion to expenditures.

We will soon be faced with the problem of distribution en route. The Railway Mail Service, which is a specialized body of men trained for distribution on the trains, will, of course, take over this work of distribution on the planes.

Within the next year I believe we will see the mails being distributed while the planes are winging their way over the heavy routes. There should be additional pay for postal workers so employed, in line with the mileage bonus paid pilots during Government operation.

Mr. Chairman, tremendous strides have been made in a few short years. We found a job for the airplane after the World War, and the air mail has been the foremost factor in developing commercial aviation in the United States.

We have also begun carrying foreign air mail under the law passed in the last session, and great achievements in that direction are just around the corner.

Mr. THATCHER. Mr. Chairman, will the gentleman yield?

Mr. KELLY. Certainly.

Mr. THATCHER. What about the policy involved in the bill if we have an extension of the air mail service to Central and South America?

Mr. KELLY. It is a vitally important policy, not alone for the advancement of our commerce with these countries but for increasing mutual understanding and friendship. It will bring all the Republics south of us into closer relationship with the United States, and anything which shortens distances adds to neighborly feeling. This foreign air mail service links up with our domestic service, and all together makes for progress of which we may all feel proud.

Mr. HASTINGS. Mr. Chairman, representing the gentleman from Tennessee [Mr. BYRNS], I yield 15 minutes to the gentleman from New York [Mr. CELLER].

The CHAIRMAN. The gentleman from New York is recognized for 15 minutes.

Mr. CELLER. Mr. Chairman and gentlemen of the committee, it is one thing for the House and the Senate to adopt a certain policy, but it is another thing to get that policy carried out by the heads of bureaus and departments.

We have had recently two flagrant illustrations of that situation where heads of departments have willfully set at naught the will of this Congress. For example, we passed at the last session the Welch salary bill. It was intended to give some modicum of relief with reference to increases of salary to the rank and file of Federal employees. But instead of carrying out the will of the House and Senate with reference to those increases, we find upon investigation in the various departments that the department heads have not really and truly and sincerely given that relief to the rank and file of the employees, but instead have increased their own salaries rather than the salaries of those employees in the lower scale. For example, in the Tariff Commission, to give one illustration, the members thereof have increased their own salaries from $7,500 to $9,000, and most of the employees under the Tariff Commission had increases at only an average of $60 a year.

I could go on and tell you many other flagrant violations of the intent and purpose of Congress in that respect. Let me call your attention to another violation of the intent and purpose of Congress that I recently discovered, having nothing to do with an increase of salary. It is in the Department of Labor. It appears that Secretary of Labor Davis on July 1, last, when Congress was in recess and not in session, issued an order called "General Order 106." In effect that order provides for a sort of registration of aliens. I do not care whether you contend that there should or should not be any kind of registration of aliens, but this thing is certain and this much we know, that there have been many bills put into the hamper and referred to committee with reference to registration of aliens, and the committee has seen fit not to report any of those measures. The Congress therefore is on record as being indisposed, if I may be allowed to put it that way, to have passed any legislation of that sort. But despite that evident purpose of Congress, this General Order No. 106, issued when we least expected that an order of that sort would come up, provides for identification cards to be issued to aliens entering the country after July 1.

Mr. TAYLOR of Tennessee. Mr. Chairman, will the gentleman yield there?

Mr. CELLER. Yes.

Mr. TAYLOR of Tennessee. How much will the execution of that order cost?

Mr. CELLER. I do not know as to that.

Mr. TAYLOR of Tennessee. Approximately?

Mr. CELLER. I can not give the figures, because it seems to me there was some secrecy concerning the order. To-day there is a report from the Secretary of Labor—the Sixteenth Annual Report—which was given to the Members this morn-

ing, and there is not a word in the report indicative of that order. Yet that order contained instructions to all the consuls abroad and immigration officials to give these identification cards in duplicate to aliens that come to this country; and it was further provided that a portrait of the alien had to be affixed, together with his name, age, country of birth, nationality, color of eyes, name of the port of arrival and of the steamship, the date of admission and status at that time, a statement as to whether quota or nonquota immigrant, and the immigrant's own signature. The cards are required to be issued in duplicate and are numbered and specify the visa number. On arrival the alien must sign the card anew, and his two signatures are to be carefully compared. The duplicate is to be retained by the Government official.

But here is the real vice of the situation and the core of the difficulty: "The admitted alien," as the order states, "should be cautioned to present it for inspection if and when subsequently requested so to do by an officer of the Immigration Service."

Mr. LAGUARDIA. And that caution in the face of the Secretary's statement that it was an unofficial identification and that the alien was not required to keep it.

Mr. CELLER. I agree with the gentleman. It indicates that we ought to suspect the motives of the Secretary of Labor, and I now call upon the Secretary of Labor to offer some adequate explanation to the Members of this House as to why he issued that general order. The burden is on him. We are entitled to know, gentlemen, particularly in view of the fact that we have failed to pass any bill providing for the registration of aliens.

But consider this as the vice of the situation. The Secretary of Labor has the right to request the issuance of a warrant of deportation upon mere suspicion. Now see what can happen. If a man happens to read a foreign newspaper in a subway or elevated train in one of our crowded cities, an immigration inspector will ask him to produce such a card; and the nonproduction of such a card would make him a suspect and put him thereafter to all the troubles and burdens of proving in a court that he did not arrive here after July 1, that he was a naturalized citizen, or that he was born here.

Now, gentlemen, there is something wrong about that kind of procedure. Why does not the Secretary of Labor manfully tell us all about this situation? But, my good friends, I am advised by some one who knows that the order with reference to the compelling of the production of the card has been withdrawn, after there was a protest, and that that order of withdrawal has just recently been made. I am going to read to you from a communication which I have received this morning, and I do not desire to disclose the author of the communication:

> I learn that a revised order has been issued by the Department of Labor omitting the objectionable passage about aliens being required to produce the card whenever demanded by the immigration authorities.
>
> No public or formal announcement of the change seems to have been made, either to immigration inspectors or the public, and it is doubtful if inspectors will even know of the modification.

Now, why is an order of that sort issued privately and without being made public, without your knowing it and without my knowing it, on a matter as important as this, particularly since the whole proposition flouts the evident purpose of this Congress? And, mind you, gentlemen, I respect any man's opinion on the subject of the registration of aliens. I happen to be opposed to it for many reasons, legalistic, moral, and otherwise, and if this Congress believes there should be no registration of aliens or that the matter should not be discussed, or be an object of concern in the House for political purposes after a presidential campaign, why does an administrative official take it upon himself, in a sort of usurpation of power, to issue this kind of an order?

Now, of course, it might be argued that there has been a continual struggle, ever since the Government began operations, between the executive and the legislative branches of Government, one trying to crowd the other out, and here we have a case where our powers are impinged. I think I have a right to call this to your attention, and I now ask the Secretary of Labor to give us some explanation—or maybe some member of this committee can give us some information—as to how and why this order was issued and why it was modified. [Applause.]

Mr. SABATH. Will the gentleman yield?

Mr. CELLER. I gladly yield to the gentleman from Illinois.

Mr. SABATH. Has the gentleman introduced a resolution requesting such information from the Secretary of Labor?

Mr. CELLER. I would gladly introduce such a resolution but what good would such a resolution do? I do not think I would get any action on such a resolution.

Mr. SABATH. I wish to say to the gentleman that the Committee on Immigration has had before it many, many bills relative to the question of the registration of aliens, but it has always looked with disfavor upon giving them favorable consideration. Therefore I know the members of that committee do not approve of any action on the part of the Secretary of Labor to do something indirectly which he was prevented from doing directly or by law.

Mr. CELLER. I am very happy to have that statment from the very distinguished gentleman from Illinois, and I am sure his words should give us and will give us great encouragement in the hope that we might get something from the Secretary of Labor in explanation of his most unwarranted procedure.

Mr. WOOD. Mr. Chairman, I yield 15 minutes to the gentleman from New York [Mr. LAGUARDIA].

Mr. LAGUARDIA. Mr. Chairman, naturally a discussion of the annual appropriations for the Treasury Department is bound to bring forth some debate on the enforcement and the merits or demerits of prohibition.

When prohibition was first put into effect the leaders of prohibition, the so-called champions of the drys, would assume the attitude that the wets were hampering and preventing enforcement, and for the first few years they would cite instances of wholesale law violation and complain bitterly that they did not have sufficient appropriations and would add more money and more agencies to enforce their pet hobby.

Now, the condition is reversed. After eight years of failure the drys have come to realize that the enforcement of prohibition is simply impossible. They are therefore playing with this great problem and letting it drag along. No dry can take the stand in this House and successfully complain of lack of enforcement.

If you will look at the hearings you will note, first, that insufficient funds are appropriated—and purposely so—to prevent a real test or a real attempt at enforcement in the so-called dry States; and, second, that of the meager amount that was given for that purpose $110,000 is going to be turned back into the Treasury.

What does this mean, gentlemen? This means that there is no desire, with the exception of a few cities like New York City, Chicago, St. Louis, and some other large cities, to honestly enforce prohibition.

Why, gentlemen, with the existing conditions in the State of Kansas, in the State of Iowa, in the State of North Carolina, in the State of Minnesota, and in all your so-called dry States where each delegation votes as a unit for prohibition and law enforcement, there is hardly a penny spent by the Federal Government for law enforcement. What a farce! What a mockery! Then they come here and ask for a measly $13,000,000 and take the stand that they are going to enforce prohibition. It is simply ridiculous.

It will take $13,000,000 alone to enforce prohibition in the city of Detroit in the State from where the great champion of prohibition, who I will admit is sincere, hails.

Mr. CELLER. Will the gentleman yield?

Mr. LAGUARDIA. Yes.

Mr. CELLER. It means, does it not, that the administration wants to give the drys the law and the wets the liquor?

Mr. LAGUARDIA. Well, it means that they have recognized the impossibility of this law and are unwilling to admit it.

Gentlemen will recall that a few years ago we had the vicious, undercover system whereby a fund was appropriated and agents were hired, spies were hired, not employees of the Government, to go out and entrap and entice persons to violate the law in order to create cases.

This appropriation was stricken out on a point of order which I made, and subsequent thereto a bill was introduced legalizing the undercover system. General Andrews appeared before the committee and I appeared before the committee and the bill was not reported.

That system has been abolished, but something new has been inaugurated. Before, the agents would go out and employ decoys, but now the agents use their own wives as decoys. I can hardly imagine anything that is lower than a man who would employ his own wife as a decoy. A man who sinks so low is unfit to be in the Government service, and there is only one that is lower than he and that is the man who directs or permits it.

Recently, in New York City, we had two or three spectacular raids. Those that were taken in these raids were tried for conspiracy and up to date all of the cases that have been tried

have been thrown out by the jury. The evidence of these particular agents and their decoy wives was so repulsive and disgusting that each case resulted in an acquittal on the count of conspiracy.

These were cases where agents were brought into New York from far-away States.

They brought their wives along at Government expense, Mr. Chairman. They stopped at fashionable hotels, and the cost of keeping their wives at these hotels was paid for from this fund. The wives were sent out as decoys, did the necessary preliminaries to buy the alleged liquor; the wives bought the liquor with Government funds, the wives consumed the liquor, and then a trumped-up charge of conspiracy made out, and, as I have stated, resulted in acquittal. Thousands of dollars of public funds were squandered by these men and women.

In one instance one of these agents from a far State went into a place with a Masonic emblem and gave the distress signal of that order in his attempt to obtain a drink, and then turned around and conspired with others to make a conspiracy case against his victim.

Now, I do not believe it is the intent of Congress, having refused to approve of the under-cover system, to spend thousands of dollars permitting agents to travel from one end of the continent to the other, to put up at fashionable hotels, and to use their wives as decoys in a futile attempt to build up so-called big cases, thereby deceiving the country in the belief that prohibition enforcement is successfully progressing.

Now, gentlemen, if you really want to try this "noble experiment," although some of us are convinced we have passed the experimental stage and that it is a complete failure—but if you want to continue the "noble experiment," you should do so honestly and fully and appropriate sufficient funds to send agents into every State of the Union.

This law was not made for New York City alone. This law was not made for just a few large cities. This is a national law you have told us. Why not enforce it in your dry States?

I have made the statement before, and the figures will bear me out, that if you take the 250 largest cities in the United States you will find that 225 of them have not a single, solitary prohibition agent within their borders.

Mr. JACOBSTEIN. Will the gentleman yield?

Mr. LAGUARDIA. Yes.

Mr. JACOBSTEIN. How much does the gentleman figure it would cost to enforce prohibition?

Mr. LAGUARDIA. I am coming to that.

To guard the Canadian border, the Atlantic coast, the Pacific coast, the Gulf line, and the Mexican border, putting an equal number of agents in accordance with population and size of the States so that the law may be properly enforced, will cost us, to start with, about $250,000,000 a year. Mark you, that is only a start. It would also require many more Federal judges, hundreds of more prosecuting attorneys, and thousands of more deputy marshals.

That would only permit about 50,000 agents on duty all the time. As you gentlemen know—and perhaps the gentlemen from dry States do not know—I am informed that the rum runners do not work on a union scale of hours, and therefore not being able to have a prohibition agent on duty for 24 hours they would work in 8-hour shifts. So you would have to have 50,000 on watch for 8 hours and 150,000 for 24 hours. That is to start with. Later you will have to have 150,000 more agents to watch the first 150,000 agents. [Laughter.]

Mr. LOZIER. Will the gentleman yield?

Mr. LAGUARDIA. I yield.

Mr. LOZIER. I am a friend of prohibition, but I want to ask the gentleman if it is not a fact that nine-tenths of all the prosecutions for the violation of the liquor laws in this Nation are in the State courts, under State laws, initiated and prosecuted by State and county officials, and not initiated and prosecuted by the Federal officers in the Federal courts. Is not that true?

Mr. LAGUARDIA. I will answer the gentleman by saying that notwithstanding all of the prosecutions in the State courts which I understand in many instances is an indirect way of making the liquor dealers pay a license—you have liquor sold in every State in the Union, in every city, town, and village. Permit me to say that no State is a better example of that than the great State of Missouri. You can go into any part of that State which you desire and get anything you want at any time.

Mr. LOZIER. The point I am making is that in the State of Missouri, and in every other State, practically all of the prohibition enforcement that we have had is by local State and county officers in the State courts, under the State laws, and not by the Federal enforcement officers under the eighteenth amendment or the Volstead Act.

Mr. LAGUARDIA. Permit me to state that State enforcement in many States boils down to one situation. If a colored man is found with a pint of gin he goes to jail for six months, but you never heard of a white gentleman in certain sections going to jail for a violation of the liquor law.

Mr. LOZIER. I want to say that the gentleman's statement, so far as it relates to the State of Missouri, is not well founded.

Mr. LAGUARDIA. I am glad that the gentleman makes that reservation.

Mr. LOZIER. I do not deny that the prohibition laws, State and national, are violated in Missouri; but the point I am making is that in Missouri, as in every other State of the Union, practically all the prosecutions for liquor-law violations are initiated and carried on by the local, State, and county officers in the State courts, and that there would be very little prohibition enforcement if it were not for the States.

Mr. LAGUARDIA. Am I to follow the gentleman to the extent that this should be left entirely to the States?

Mr. LOZIER. Oh, no; but the point I make is that for several years the Federal administration has made no sincere or aggressive effort to enforce the Volstead Act or the eighteenth amendment, but has largely left to the States the duty of prosecuting violations of the liquor law.

Mr. LAGUARDIA. That leaves us just where we have been all of the time, that this prohibition question can not be solved, that it is impossible humanly, legally, and financially, for the Federal Government of the United States to enforce this law. That being so, following the reasoning of the gentleman from Missouri, it should be left to the States. Then we say to the States that if it is going to be left to Missouri, to North Carolina, you will have to leave it to New York and let New York do what it wants to.

I want to say now, that the gentleman from Missouri makes a very good argument in support of our contention. It being impossible to deal with the situation nationally through the Federal agency, it is necessary to leave it to the States, and if you leave it to the States, you have got to leave it to all of the States and let the States decide it according to their own conditions and the desire and will of their own people.

The CHAIRMAN. The time of the gentleman from New York has expired.

Mr. HASTINGS. Mr. Chairman, by direction of the gentleman from Tennessee [Mr. BYRNS], I yield five minutes to the gentleman from South Carolina [Mr. MCSWAIN].

Mr. MCSWAIN. Mr. Chairman, I desire to ask the chairman of the subcommittee [Mr. WOOD], the gentleman from Indiana, with reference to a paragraph in line 9, page 46 of the bill, where there is a lump sum appropriation of $350,000 for remodeling, enlarging, and extending completed and occupied public buildings in emergent cases, not to exceed $25,000 in any one building. I want to ask the gentleman if the committee did recommend to this House the total sum that was recommended to it by the Budget and the Department of the Treasury?

Mr. WOOD. We did.

Mr. MCSWAIN. My purpose in asking the question was because the Department of Justice has made a request on the Treasury Department for an additional space by way of enlargement for the building at Greenville, S. C., but as there was not money enough in this year's appropriation, it was promised that it would be included in the estimate of the fiscal year ending June 30, 1930. I assume that it is in this appropriation bill, and it must be from what the chairman says.

Mr. HASTINGS. I yield 20 minutes to the gentleman from Texas [Mr. JONES].

THE NEW KINGDOM OF COTTON

Mr. JONES. Mr. Chairman and gentlemen of the House, to one whose birthplace is in the South it is a rare privilege to see raw cotton being fed into long rows of machines and coming out a finished product that looks, feels, and wears like silk. This is one of the miracles of modern industrial chemistry. It is now being done on an extensive scale at a plant already in operation in the South.

Silk is one of the oldest of clothing fabrics. It is produced in a curious way. The silk worm eats mulberry leaves—he will eat nothing else—and spins a cocoon. This cocoon is composed of a silk thread which is frequently half a mile long. It is unwound by hand. From this thread the silken fabric is woven.

A CHINESE SECRET

Nearly 5,000 years ago a Chinese empress named Si-Ling-Shi is reputed to have aided in the process of making silk and to have established the Chinese silk trade. It is claimed that she personally supervised the cultivation of the mulberry trees, the growing of the silk worm, the reeling of the silk; and she

is credited with the invention of the loom. For nearly 3,000 years the process was kept a secret. At about that time the secret leaked out to Japan, India, and other countries of the East.

Tradition has it that a princess carried to India in a headdress the necessary supplies and information for the establishment of the trade in India, and from this meager beginning the great silk trade of India was builded. The Japanese sent several young people to China to learn the process.

THE SECRET BECOMES KNOWN

One of the Syrian missionaries, at the request of the Emperor Justinian, upon leaving the closed ports of China, carried a bamboo cane in the hollow of which was inclosed some eggs of the worm and seeds of the mulberry tree. But the West could not rival the cheap labor of the East, and for centuries China, India, and Japan had a practical monopoly in caring for the silk worm and in the process of slowly unwinding the long filament of the cocoon.

There is little doubt that Cleopatra clothed herself in Chinese silk, for it was imported into other countries of the Old World long before the time of the Cæsars. Through all of the intervening centuries it has been the premier clothing material of the world, and the tiny silkworm has been the aristocrat of the weaving craftsmen.

For many years China and Japan have been selling to America more than $400,000,000 worth of silk annually. For years shiploads of silk have been brought to American shores to satisfy the American market.

A CHEMICAL REVOLUTION

But an industrial revolution is in progress. In all lines of endeavor chemistry is playing a large part in this revolution. For years chemists have been searching for substitutes for high-priced luxuries. A German chemist, after years of toil, has found a process chemically analogous to that used by the delicate consumer of the mulberry leaf. It is an artificial silk, altogether different from rayon, which latter is made from wood pulp and other plant fiber. Strange to say, the commodity that is being translated into this marvelous fabric is none other than our own familiar cotton, of which the South produces two-thirds of the world's supply.

NEW USES FOR COTTON

For years, as a member of the Committee on Agriculture, I have been studying the problems that are peculiar to the South. We produce a surplus of cotton. This brings us face to face with the age-old problem of the surplus. In an effort to aid in its solution, I secured the passage of a measure providing for a permanent study and investigation into new uses for cotton—the placing of it in channels into which it has not heretofore gone.

Some wonderful work has been done along this line by both the Department of Commerce and the Department of Agriculture. Hundreds of thousands of bales are now channeling into new uses, and the work is just beginning. In this connection I want to pay tribute to the new Senator elect from Texas, Mr. CONNALLY, who offered the first amendment to provide an appropriation for carrying out the search for new uses; to Mr. FULMER, of South Carolina; and a number of others of my colleagues who have assisted in the work.

CARING FOR THE SURPLUS

This is real farm relief. If money is loaned to take a million bales of cotton off the market, it will help temporarily, but when it is again thrown on the market it will again depress it. But if a new use is found for a hundred thousand bales, it is forever lifted, and the price of the commodity will necessarily be enhanced.

For years the South has been selling her cotton in other markets at prices named by the buyer and purchasing supplies in those same markets at prices named by the seller. This had made a sort of stepchild out of the South, economically speaking. I am not complaining. People naturally look after their own interests. This is simply an economic fact.

The South is developing industrially as well as agriculturally along with the other parts of the Nation. Her plains and hillsides are thrilling with a new hope. I want to see an all-around development—a harmonious prosperity all over the Nation—with equal opportunities for all.

THE PLANT

It is but natural, therefore, that I should want to visit the factory where this wonderful new fabric is being made.

And what a marvelous new creation it is. It is located at Elizabethton, Tenn. At what was two years ago a country village a $20,000,000 factory has been built.

THE PROCESS

This plant takes cotton "linters," breaks down the structure, forms it into a gelatin-like substance, mixes it with chemicals, squeezes it through an instrument having the appearance of a glass funnel, with fine holes, and with a finger-like process lifts the fine strands out of the chemically charged waters. After drying, it is a thread that looks like and has practically the tensile strength of silk. It is woven into a cloth that looks, feels, and wears like silk. It requires an expert to distinguish it from that age-old commodity.

The village has suddenly sprung into a busy little city of 12,000 people. More than 2,000 people are being employed at the long rows of machines, one of which will do the work of a thousand silk worms. Additional units are being added to the plant, and the revolution is on.

THE SOUTH'S HANDICAP

When the Civil War was over the South was crippled, her manhood shot to pieces, her fields were laid waste, her barns were burned, and she was a broken country—broken in finance, broken in agriculture and industry, broken in everything except in spirit.

With that spirit my father and his three brothers who had worn the gray, linking hands with the other soldiers of the South, stooped to gather up the shattered fragments of their once prosperous country. They ploughed their fields to plant cotton. They wore their lives away in its production. At the shrine of cotton practically every southerner has bowed the head and bent the knee. While thus toiling under a blazing summer sky her citizens have sold their product at another's bidding and dreamed of the time when their women could wear the product known as silk. That dream is coming true, not through silk itself, but through the industrial genius and chemical revolution that is transforming the South's greatest fleecy staple into a fabric that has all of the aristocracy of silk.

THE CITY OF HAPPINESS

There is a mythical story that a young man started out to search for the city of happiness. With buoyant step he started across the hills. Meeting an old man he was asked where he was going. The youth replied that he was going to search for the city of happiness. He then told the young man that he, too, had started the selfsame way in early life, had wandered all over the world, had sought happiness in many lines of endeavor and in many ways, and had just found that the city of happiness is at every man's door, and that all around him were the materials for the building of that city.

The South has within her own borders and at her own threshold the raw materials for the building of a wonderful prosperity. She has the climate, she has the power, and her people have the determination to translate these resources into her own development. She is building her own plants, and with the strength and sinew of her own fiber, in the loom of her own genius, and with the industry of her own hands she is weaving the garment of her future glory. [Applause.]

Mr. LOZIER. Mr. Chairman, will the gentleman yield?

Mr. JONES. Yes.

Mr. LOZIER. I am sure the gentleman understands history. Is it not true that with the ancient Egyptians, linen was the fabric with which royalty and the priesthood were clothed, and that was long before silk was introduced from China?

Mr. JONES. Yes; but the silk to which I refer became a world commodity through the efforts of the silkworm or moth. It originated in China. Its early history is lost amid the mysteries of traditions. But it is definitely known that the process was being used in China many centuries before the Christian era. Traders carried silk articles to other countries long before the process was known outside of China.

Mr. GIFFORD. If the gentleman would yield, in the midst of the gentleman's rejoicing I would take this opportunity to say that in my city is now manufactured a superfine product called "Sudanette," made entirely of cotton. I desire to put this on exhibition with the gentleman's fabric, which is an imitation silk. In Sudanette the cotton does not have to be destroyed in the process of manufacture, and it has wonderful wearing qualities.

Mr. JONES. I wish to say in answer to the gentleman I have no quarrel with the comparison of any commodity. I welcome anything that will use the raw products of the South which we have been growing all of these years and selling at a low price. The more they use the better we will be pleased. The special plant to which I refer makes only the silk thread or yarn. This is shipped all over the United States for the purpose of being woven into the various types of cloth and made into the garments which I have exhibited. All of this helps the price of cotton and benefits the whole country.

I have here a number of articles of clothing that have been made from this artificial silk. Experts may be able to detect it. It looks like silk to me. It appears to have the tensile strength of silk. You are at liberty to examine these samples.

Here are several varieties of cloth and knitted wear all made of pure cotton, and low-grade cotton at that. Here is a tie, a muffler, knitted wear, undergarments, hosiery, and other articles having the appearance of silk.

Those are simply some of the many commodities that are being made from cotton. At a later time I expect to discuss rayon and the many different new blendings of cotton and other materials that are now being made and are in process of development all over the country. It is this work which the Department of Commerce and the Department of Agriculture are seeking to assist and encourage.

Mr. MAGRADY. Mr. Chairman, will the gentleman yield?

Mr. JONES. Yes.

Mr. MAGRADY. Why was this plant located in the South, and what capital directed that?

Mr. JONES. The plant was located at Elizabeth, Tenn., by German and American capital. They needed abundant quantities of pure water which is best adapted for making this particular brand of artificial silk. Other plants have been erected, but this is distinctive and in order to bring the subject up I called it to the attention of the Members of the House.

Mr. KETCHAM. Mr. Chairman, will the gentleman yield there for a question?

Mr. JONES. Yes.

Mr. KETCHAM. Will you please emphasize particularly the grades of cotton used in the manufacture of this fabric?

Mr. JONES. Yes. I am glad the gentleman called my attention to that. Some of the Members of the House may not understand what is meant by cotton linters. When the cotton is originally picked, the seeds and the lint or fiber are all together. The seeds are taken out by the ginning process. The ginning process leaves some lint on the seeds. A second process takes these short and broken pieces of lint off these seeds.

This latter is what they make into this beautiful list of commodities that I have talked to you about. It does not compete directly with the regular textiles. In other words, this takes a low-grade cotton and cotton refuse and makes a marvelous commodity therefrom. They can use any kind of cotton, but they use principally "linters" and low-grade cotton.

Mr. GIFFORD. At what price is it sold for?

Mr. JONES. I do not care to go into those matters, but I will say that it is much cheaper than silk. I do not want to be put into the attitude of trying to boost the product of any particular plant. Therefore I refrained from mentioning the firm that makes it or the particulars of it. There is no silk produced in this country, as Members know.

Mr. BYRNS. Mr. Chairman, will the gentleman yield?

Mr. JONES. Certainly.

Mr. BYRNS. Has not the gentleman taken into consideration the plant at Old Hickory, near Nashville, which is doing the same work?

Mr. JONES. Yes. That is making a fabric out of plant and wood fiber. I understand they use the viscose process.

The CHAIRMAN. The time of the gentleman from Texas has expired.

Mr. BYRNS. I yield the gentleman from Texas five additional minutes.

Mr. JONES. I expect, when the House is not especially busy, at some future time to take up the discussion of these splendid plants. Besides those in Tennessee there are others at various points. There are plants at Hopewell, Roanoke, and Covington, Va.; they have one at Rome, Ga.; and one at Parkersburg, W. Va.; and another at Cumberland, Md.; and one at Asheville, and one at Burlington, N. C.; as well as at other points; and these all make a form of artificial silk known as rayon.

Mr. BYRNS. This concern at Nashville is going to be a large consumer of cotton.

Mr. JONES. Yes. They have already expended several millions of dollars there, and have a capacity for producing some eight or ten million pounds of rayon annually. I regret I have not time to go into these things in this particular discussion. I thank the committee for giving me this time. [Applause.]

Mr. BYRNS. Mr. Chairman, I yield five minutes to the gentleman from Missouri [Mr. LOZIER].

The CHAIRMAN. The gentleman from Missouri is recognized for five minutes.

Mr. LOZIER. Mr. Chairman and gentlemen of the committee, in my colloquy with the distinguished gentleman from New York [Mr. LAGUARDIA] I do not think he was justified in his conclusion that I favored the enforcement of prohibition by State laws exclusively. If he drew that conclusion, it was unwarranted. I believe in national prohibition. I believe in the most active and earnest and sincere cooperation by the States. But the point I sought to develop in my colloquy with the gentleman from New York was this, that national prohibition had never been given a fair trial in America; that nine-tenths of the prosecutions for the illicit sale or possession of liquor were prosecutions initiated and conducted by local, State, and county officers in State courts, and not prosecutions under the eighteenth amendment or under the Volstead Act initiated by Federal officers in the Federal courts.

I want to emphasize the fact that prohibition would not be an issue in the year of our Lord 1928 or hereafter if the national administration had made an aggressive, earnest, and sincere effort to efficiently enforce the eighteenth amendment and the Volstead Act. And if within the last five years the officers of the States and the officers of the counties, functioning under State statutes, had not made an earnest and honest effort to enforce the liquor laws of this Nation, there would have been a deluge of rum in this Nation and in every part of it.

I want to say as a friend of prohibition that the failure of the Federal Government to earnestly and sincerely enforce the eighteenth amendment has injured the prohibition cause more than all the wet forces in America combined. And until the national administration determines to no longer allow this law and this constitutional provision to be flouted and trampled underfoot, and until an earnest and intelligent effort is made by the Federal Government to vigorously enforce prohibition, national prohibition will be a farce and failure. And the point I want to leave with you is this: That if you go into the 48 States of this Union you will find that 9 out of every 10 convictions under laws relating to intoxicating liquors are convictions under State statutes, in prosecutions initiated by local and county officers, and prosecuted in State courts, and are not prosecutions initiated by Federal officers and are convictions with which the Federal administration has nothing to do.

The truth of the business is that if the national administration, in the enforcement of the eighteenth amendment and in the enforcement of the Volstead Act, had been half as efficient and had been half as vigilant as the various States have been in enforcing State statutes, we would not now have the prohibition issue before us, and it would not be an experiment, because in the last seven years, as the result of the failure of the Federal Government to enforce the law, the prohibition cause has suffered more severely than from the opposition of the combined wet forces of this land.

I do not want the gentleman from New York [Mr. LAGUARDIA] or my colleagues in this body to infer from my colloquy with him that I am opposed to national prohibition or that I want the States exclusively to have charge of the enforcement of the liquor laws.

Mr. KETCHAM. Will the gentleman yield?

Mr. LOZIER. I yield to the gentleman.

Mr. KETCHAM. The gentleman said the prohibition law is enforced in 48 States; he meant 47 States?

Mr. LOZIER. I meant taking the 48 States as a whole.

Mr. KETCHAM. In all fairness, it seems to me, the gentleman should mention specifically the fact that the State of New York, from which the gentleman comes, has no State enforcement provision; in fact, that provision has been repealed?

Mr. LOZIER. Yes; and I will further state that the Great State of Massachusetts, from which our President comes, has never enacted a State enforcement law, and if it had not been for the State enforcement laws in the several States of this Union we would have had a deluge of rum all over this land. The point I am trying to emphasize is that the American people, the dry forces of America, will never be able to get prohibition until as honest and earnest an effort is made by the national administration to enforce national prohibition as is being made by the several States to enforce State prohibition statutes. [Applause.]

The CHAIRMAN. The time of the gentleman from Missouri has expired.

Mr. WOOD. Mr. Chairman, I yield 25 minutes to the gentleman from New York [Mr. BACON].

Mr. BACON. Mr. Chairman and members of the committee, as a member of the subcommittee on the Treasury and Post Office appropriation bill I want to call the attention of the Members to what the Post Office Department has accomplished under two acts passed at the last session of Congress. I refer particularly to the Kelly bill, which was enacted on March 8,

1928, and the White bill, which was enacted on May 22, 1928. The Kelly bill, as you know, permits the United States to enter into contracts to carry the mail to foreign countries by airplane on a 10-year basis, at not to exceed $2 a mile. However, before going into the question of carrying the mail by aircraft to foreign points I want to briefly review what we have done in carrying our domestic mail by aircraft.

This map shows you the air-mail lines now in existence and in operation within the borders of the United States, a total mileage of 11,764 miles. There are 27 air-mail routes, 22 different contractors, and the total mileage flown daily is 25,385 miles, a really stupendous feat and not exceeded by any other nation in the world. When you realize that the air mail only began in 1922, I think you will agree that the accomplishment in the last five or six years has been stupendous. In 1922, when the Government first started to carry mail by aircraft, the aircraft industry in this country was practically nonexistent, and the Government at first had to build its own airplanes and carry the mail itself. In the 5-year period it spent a total of $17,000,000, flying 15,853,242 miles in the course of the 5-year period. The result has been that due to the Post Office Department the airplane industry in this country has been put on its feet, so that to-day there are 140 concerns engaged in the manufacture of aircraft, with a capitalization of about $100,000,000. In fact, we to-day export airplanes to other countries in the world.

This progress has been entirely due to the efforts of the Post Office Department in establishing the carrying of the mails by air. In 1927 the industry had advanced to such a stage that the Post Office Department was easily able to let contracts to private concerns to cover these 12,000 miles, as is shown on this map. I merely mention this past history to give you some little background for what I am going to talk about next.

Mr. MORTON D. HULL. Will the gentleman yield?

Mr. BACON. Gladly.

Mr. MORTON D. HULL. You say they now fly 25,000 miles a day?

Mr. BACON. I will give you the exact figures. The total mileage flown per day is 25,385 at the present time.

Mr. MORTON D. HULL. How many pilots does that involve daily?

Mr. BACON. I am not familiar with the number of pilots because to-day all of the air mail is carried by contracts with private concerns and it is up to the private concerns to provide the pilots. Perhaps the gentleman from Pennsylvania could answer that question. When the Government operated the air mail there were 43 pilots whose names and records I will later put in the RECORD.

Mr. KELLY. I will say that there are about 90 pilots flying per day.

Mr. BACON. I thank the gentleman. It may also interest you to know that the airplane production in this country to-day is 500 airplanes per month and that there are 7,698 miles of airways lighted; and during the next year, under the Department of Commerce, 5,308 additional miles will be lighted, so that the total air mileage that will be lighted, so as to permit of night flying, will be 12,990 miles. The Department of Commerce to-day receives daily, on the average, 100 applications for licenses for pilots and mechanics and machines. I give you these figures to show the tremendous growth of the industry in the past five years, due entirely to the efforts of the Post Office Department.

Mr. LARSEN. Will the gentleman yield?

Mr. BACON. Certainly.

Mr. LARSEN. Can the gentleman state what the wreckage or wear and tear is on these planes, or probably depreciation would be better?

Mr. BACON. I do not have any data on that, but I have data showing those figures while the Government itself operated the air mail, and I will be glad to put them in the RECORD. However, I do not have those figures with me at the present moment. At the conclusion of my remarks I will insert a summary of the results of the 5-year period under Government operation. This was prepared by the Post Office Department, and is of great historical importance.

Mr. COX. May I make an inquiry of the gentleman?

Mr. BACON. Gladly.

Mr. COX. I would like to know if the gentleman is going to discuss the question of to what extent the users of the mail in the territory affected are patronizing these routes.

Mr. BACON. Yes; I can give the gentleman some figures on that.

In July of this year the poundage carried was 244,000 pounds; in August, 419,000 pounds; in September, 423,000 pounds; in October, 467,000 pounds.

Mr. COX. Quite an increase.

Mr. BACON. An increase all along the line, partially due, of course, to the reduction in the postal rate, which went into effect on August 1 of this year.

Now, under the Kelly bill the Congress authorizes the department to enter into contracts to carry American mail by aircraft to foreign countries. This was enacted only in March, 1928.

The department has now either entered into contracts or is about to enter into contracts to carry the mail from Miami, Fla., to Key West, to Habana, down through Central America to the Canal Zone; and from Miami to Habana, through to Porto Rico, down to Trinidad, and across the northern part of South America to the Canal Zone, thus entirely encircling the Caribbean Sea. It is interesting to note that these air-mail contracts are going to cover the exact route that that fine young American, Lindbergh, flew when he made his trip only last year. He may be called the pioneer in this territory. [Applause.]

Mr. HASTINGS. What is the mileage of that circuit?

Mr. BACON. The total mileage is 7,750, approximately.

Contracts have been let for daily service from Miami to Key West, Fla. Contracts have been let, incidentally, also for a daily service from New York to Montreal and from Seattle to Victoria, which, of course, is not shown on this map.

Contracts have been awarded from Key West to the Canal Zone for a daily service. Contracts have been awarded or are about to be awarded for a service from the Canal Zone to Paramaribo, which is shown here on this map [indicating] for a three-times-a-week service. In other words, daily service from Miami to the Canal Zone, three-times-a-week service along the north coast of South America to Paramaribo.

Mr. HUDSON. Will the gentleman yield?

Mr. BACON. Yes.

Mr. HUDSON. Is the first route that the gentleman spoke of, from Miami to the Canal Zone, connected with Mexico City in any way?

Mr. BACON. No; it is not.

Mr. HUDSON. I wondered if a branch service was contemplated.

Mr. BACON. We are about to establish a service direct to Mexico City by way of the southern part of the United States.

Mr. HUDSON. Going through St. Louis?

Mr. BACON. Yes. This route via Key West and Habana does not go to Mexico City at all.

Then contracts have been awarded for a service from Key West to San Juan, P. R., three times a week, and contracts will be awarded shortly for a service from San Juan, P. R., to Trinidad, thus covering or encircling the entire Caribbean Sea.

It is further contemplated by the Post Office Department, and the present bill carries the appropriations for the work, to let a contract from Colon right down the west coast of South America, stopping in Colombia, Ecuador, Peru, to Concepcion, in Chile, a total distance of 3,800 miles, for twice-a-week service.

The importance to this country of this effort can perhaps be best illustrated by showing you what the French are doing.

Mr. HUDSON. Will the gentleman yield right there for a moment?

Mr. BACON. Certainly.

Mr. HUDSON. Are the Governments of South America cooperating in the work?

Mr. BACON. Not only cooperating, but gladly cooperating and welcoming this service. And I may say that there is nothing going on to-day that is so helpful in the establishment of cordial relations between this country and the countries of South America as the development of these air-mail routes.

The French have now a service from Paris to Buenos Aires one each way a week—a weekly service. They have a daily service from Paris to Casablanca and weekly from Casablanca to Montevideo and Buenos Aires by way of Rio Janeiro, Pernambuco, and other cities along the east coast of South America.

They are also extending their service from Natal, where they make their landing in South America north to Paramaribo, and the French were very anxious to extend further north, covering the Caribbean Sea and coming into the United States. So, to my mind, the Kelly bill was passed just in time, because that act has permitted this country to extend the service all over the Caribbean Sea in the Central American Republics before the French could extend their service north into that same territory. Agreements will probably be made for exchange at Paramaribo between the French service and our service.

It is interesting to note that the French service at the present moment makes this jump of 1,300 miles from Cape Verde to Ile Nerona by having two fast cruisers, one going in each direction once a week, but within a few months they expect to replace those cruisers with seaplanes, so that within the next year the

French will be carrying air mail from Paris to Buenos Aires all the way over by the air route.

Mr. LARSEN. Will the gentleman state the relative time required in delivering a letter from Paris to that point and delivering one from New York or from one of our south Atlantic ports like Jacksonville?

Mr. BACON. I am not entirely familiar with the exact time from Paris to Buenos Aires.

Mr. LaGUARDIA. You can average it at 100 miles an hour.

Mr. BACON. The total distance flown by the French is 6,300 miles. Of course, there is a delay because of the carriage of the mail by fast cruisers over this jump of 1,300 miles.

Mr. LARSEN. Then you can deliver a letter from New York to the same point in much less time?

Mr. BACON. It would go by airplane in less time; yes.

Mr. LARSEN. And therefore a great advantage results in the matter of commerce, does it not?

Mr. BACON. There is no doubt about that.

Perhaps this statement will help answer the gentleman's question. It is hoped that as this mail service develops to have mail carried from New York to Colon by air all the way in two days.

Mr. LARSEN. Where it takes a week now from France, practically speaking?

Mr. BACON. About a week from Paris to Buenos Ayres, I should think, though I have not the exact information.

Mr. LARSEN. So we get it there in one-third of the time.

Mr. BACON. Yes. So when the extension is made from the Canal Zone to Chile it will mean that we can get a letter from New York to Chile in four or five days while it now takes about three weeks.

Mr. LARSEN. It will result in a great increase of commerce, will it not?

Mr. BACON. There is no question about it, the carriage of letter mail by airplane will not only increase cordial relations between ourselves and Central and South American countries, but it will encourage commerce and open up new markets.

The Germans have an exclusive concession for Colombia, and they now operate a mail-and-passenger service from the port at the mouth of the Magdalena River to Bogota and back by airplane. It is hoped that an arrangement will be made with the German company for an exchange at that point.

The Germans also, as well as the French, were trying to press forward to carry mail into the United States covering the Caribbean Sea, but the Kelly Act permitted the United States to take the lead as far as the Caribbean and the west coast of South America are concerned.

The other bill that I have referred to that has an effect on the Post Office Department bill is the White bill, passed in May, 1928. I would like to take a few minutes to tell what the Post Office Department has done for American shipping as the result of that bill. Before doing that, however, I would like to show you to what low depths American shipping had sunk prior to the passage of the White Act.

From 1921 to 1927, not a single ship had been built in an American yard for overseas trade—not a single one in a period of six years. During that period 1,034 vessels were built throughout the world. Of that number, only 141 were built in this country, and those not for overseas trade but for coast-to-coast trade. So by March, 1928, we were only building 2 per cent of the ship building of the world.

Since 1921 there has been a marked decline in shipbuilding of seagoing vessels in the United States. Of approximately 7,900,000 tons built between 1921 and 1927, only 309,000 tons were constructed in American yards. Of 1,034 vessels making up this total of new construction, but 41 were built in our country. Of 307 motor ships in this total, but 2 were built here. At the end of 1927 we were building but 3¼ per cent of the construction going on in the world, the smallest percentage in 35 years. By March of this year that percentage had shrunk to 2 per cent, and we found ourselves tenth among the nations of the world in shipbuilding. During this time, notwithstanding the construction of this limited tonnage for the intercoastal and near-by trades, we had not built in America a single ship for the overseas trade.

We can not expect American exporters and importers to utilize American ships unless and until those ships furnish a comparable service with foreign-flag ships. In these days speed and service are synonymous. The whole history of transportation by rail, motor, and airplane is the response to the demand of the American people for speed in the transportation of persons, mail, and things. It is as essential upon the sea as upon land. The tragic fact is that of more than 4,000 foreign ships competing in America's foreign trade at least 20 per cent, or more than 800, have been built since 1921, during which time, as pointed out above, not a single overseas ship has been built in our own yards to carry America's commerce.

Then the White bill was passed which permitted the Post Office Department to make contracts for carrying the American mail on ships built in American yards and flying the American flag, required to be manned by a crew 50 per cent American and four years later by a crew 75 per cent American.

The passage of the White bill has resulted in 24 contracts to carry the mail in American ships, under the increased rates allowed by that bill. I have indicated in red these 24 contracts, showing where the mail is now, or will be, carried this year in American ships to foreign ports. These red lines show you the contracts already made, and there are more pending. Incidentally this appropriation bill will only show an increased cost of $7,500,000 as the result of the White bill, but it has resulted in 24 new ships contracted for. Under those contracts there must be a ship or ships built within three years or the contract is canceled.

Therefore under these contracts shown in red 24 ships have already been contracted for and must be built within three years. So that since May, 1928, the effect of the White bill through the operation of the Post Office Department will result in 30 new ships being built in American yards, to fulfill these contracts. The approximate total cost of these 30 ships is in the neighborhood of between seventy-five million and one hundred million dollars. This is but a beginning. As additional contracts are let additional ships will have to be built. We can look forward confidently, therefore, to a revival of the American merchant marine made possible by this wise legislation. We serve notice on all that America intends to carry a large part of its own goods, in its foreign trade, in American ships, built in American yards, and owned by American citizens. Postmaster General New well stated the situation when he recently wrote:

> Our water-borne commerce involves the annual transportation of more than 113,000,000 long tons of freight valued at approximately $8,000,000,000. The annual charges on the shipments amount to more than $750,000,000. American ships carry only one-third of that tonnage and collect less than one-third of the freight payments. If, instead of 30 per cent, they carried 60 per cent of the traffic the increase in revenues to American shipping would amount to $250,000,000 annually. These figures are approximate, but they illustrate the benefits in dollars as well as in trade that the United States may enjoy with an adequate merchant marine, such as the Post Office Department hopes to foster under the ship-pay provisions of the new act.

The total cost to the Government probably will never exceed $24,000,000 a year under this mail subvention. This appropriation bill carries an increase of $7,500,000 to carry out the first steps of the White bill. It is interesting to note that Great Britain began making mail contracts as early as 1838, and all through the years since she has consistently followed this policy. Her payments on this account in the last 35 or 40 years have aggregated approximately $160,000,000, or about $40,000,000 per year. In the same period France has paid in mail contracts approximately $188,000,000, or about $47,000,000 a year.

Mr. KELLY. Will the gentleman yield?

Mr. BACON. I will.

Mr. KELLY. What is the difference in the payment between the rate paid to foreign companies in foreign ships and the rates paid American ships?

Mr. BACON. I have not the exact figures of the mail contract.

Mr. KELLY. I have understood that it was about double.

Mr. BACON. As a matter of fact, it is about double, but there is a requirement for speed that must be taken into account. It is on a mile basis as well as a speed basis. So that as the speed of the boat goes up the rate goes up.

Mr. KELLY. So that we are getting better service and at the same time getting a merchant marine.

Mr. BACON. There is no question about that. The receipts from the carrying of foreign mails will be about $18,500,000 a year.

Mr. BRIGGS. And is it not true that the receipts practically meet the obligations of the Government?

Mr. BACON. They more than meet the obligations under this bill, and it will be some time before the bill will carry $20,000,000 a year.

Mr. BRIGGS. I mean about meeting the obligations under the bill as planned in its operation.

Mr. BACON. Practically.

Mr. BRIGGS. Not only that, but the amount to which the gentleman refers as the receipts now, are expected by the Post

Office Department to be considerably augmented as the contracts are met and speedier boats are put into the service.

Mr. BACON. The gentleman is correct.

Mr. BRIGGS. Has the gentleman any information as to whether these contracts are to be carried on, continued, in order to make it possible to help the other Government services being maintained and acquired by private interests?

Mr. BACON. These contracts are let on a 10-year basis.

Mr. BRIGGS. I am not speaking of those let but of letting others.

Mr. BACON. There is no question about that. This is only the beginning. The act was passed in May last, and it is only December, and it is interesting to note how quickly and energetically the Post Office Department advertised for bids for these contracts, and how carefully they carried out the intention of Congress by putting the act into immediate effect.

Mr. BRIGGS. The point I make is that it is the policy of the administration to continue to make such contracts.

Mr. BACON. There is no question about that.

Mr. BRIGGS. Where it may be desirable, and thereby with that use of those mail contracts to enable many of the Government-operated services and ocean lines to be acquired by private interests and conducted by them. Is not that true?

Mr. BACON. There is no question about that.

The CHAIRMAN. The time of the gentleman from New York has expired.

Mr. WOOD. Mr. Chairman, I yield five minutes more to the gentleman from New York.

Mr. BACON. I will now give some examples of the types of boats, contracts for which have been let under this act. The Grace Line, running to South America, has let a contract for a boat of 16 knots. The Cuban Mail Line has let a contract for 2 boats of 19 knots. The Matson Line, running from San Francisco to Australia, is about to let a contract for 2 boats of 18 knots. The Dollar Line is about to contract for 3 boats of 18 knots, and incidentally the Dollar boats will be somewhat similar to the *California* and the *Virginia* which you have seen advertised so much recently—they are fine 20,000-ton boats that go from New York to San Francisco and back.

Mr. LAGUARDIA. And the *Malloto*.

Mr. BACON. That boat goes to Honolulu. These boats are to go to Australia. The Export Line, running from New York to the Mediterranean ports, has let a contract for 4 boats of 14 knots, and the South African Line has let a contract for 1 boat.

Mr. BLACK of New York. What effect has all this on the United States lines?

Mr. BACON. The United States lines run from New York to North Atlantic points, and are operated by the Government, but they are advertised for sale at the present moment.

Mr. BLACK of New York. Have they mail contracts?

Mr. BACON. I am not sure about that. Of course, if that line is sold and the new owners wish to have a mail contract, they will have to build new boats within three years. So, for the first time since 1921, American shipping is getting on its feet, due to the White bill entirely. When you realize that between 1922 and 1927, England outbuilt us 50 to 1, Germany 10 to 1, France 5 to 1, Italy 5 to 1, Japan 4 to 1, and that we were only about even with Russia prior to the passage of this act, you can see what an important effect the White bill is going to have on the future of American commerce and an American Merchant Marine.

It is also interesting to note that the shipyards are not the only ones that benefit from the building of these boats. It has been carefully estimated that only 39 per cent of the cost of a big boat like the *Leviathan* is expended within the shipyard. Fifty and eight-tenths per cent of the cost of a boat is spent on the products of other industries that go into the building of the vessel. Those other industries represent industries in every one of the States of the Union. The difference between 89.8 and 100 per cent is made up in taxes, insurance, depreciation, and freight. It is also interesting to note that American labor benefits by the building of these ships, because the labor factor in building a boat is about 78 per cent, not only in the yard but throughout the industries all over the country, the products of which go to make up the boat. Mr. Secretary New had an estimate made as to the source of the materials that went into the building of a boat. For example, the lumber comes from South Atlantic States, and from Arkansas, Florida, Idaho, Oregon, Vermont, Washington, and the iron ore from Alabama, Michigan, Minnesota, Ohio, Tennessee, West Virginia; while the steel comes from Maryland, New Jersey, Pennsylvania, Ohio, West Virginia; and the copper comes from Arizona, Colorado, Michigan, Montana, New Mexico, and Utah; the lead from Colorado, Idaho, and Missouri; the silver from Arizona, Colorado, Utah, and Nevada; the zinc from Kansas, Missouri; and the industrial States of New England furnish hardware, fittings, tools, and other equipment; and the turpentine and oil from Florida, Georgia, Oklahoma, Arkansas, Texas, and West Virginia. Those products make up 50 per cent of the cost of a vessel.

So I think Congress can be proud of the two acts passed, the Kelly and White Acts, and the Post Office Department should be congratulated on the energy with which they put both of those two acts into effect. [Applause.]

The CHAIRMAN. The time of the gentleman has expired.

Mr. BACON. Mr. Chairman, I ask unanimous consent to extend my remarks by inserting at this point a history of the Government-operated air mail service, prepared by the Post Office Department, which I have referred to in the course of my remarks.

The CHAIRMAN. Is there objection? [After a pause.] The Chair hears none.

The matter referred to is as follows:

HISTORY OF GOVERNMENT-OPERATED AIR MAIL SERVICE

The first aerial mail transportation may be traced back to 1870, when in that year letters were carried out of beleaguered Paris by free balloons cast adrift in the winds. The first of such flights was made on September 23, 1870, and carried 500 pounds of mail. This service, of course, was not satisfactory, as the balloons could not be controlled and were just as liable as not to land in enemy territory. Some of them were carried by the winds many miles from Paris before they came down, and some of them were never heard of after leaving Paris.

In the year 1911, demonstrations of airplane mail service were made in India, England, and the United States. The first air mail service in the United States, however, was conducted at the aviation meeting at Nassau Boulevard, Long Island, N. Y., during the week of September 23 to 30, 1911. Earle L. Ovington, with his "Queen" monoplane, was duly appointed an air-mail carrier and covered a set route between the temporary post office established at the flying field and the post office at Mineola, N. Y., dropping the pouches at the latter point for the postmaster to pick up. This service, performed without expense to the department, was flown at regular intervals during the period, a total of 32,415 post cards, 3,993 letters, and 1,062 circulars being carried. It was quite satisfactory on the whole and very promising.

A few other similar experiments were made during the remainder of the year 1911, and the Post Office Department, recognizing the possibility of developing the airplane into a practicable means of aerial transportation, made recommendation to Congress early in 1912 for an appropriation of $50,000 with which to start an experimental service, but Congress refused to grant the appropriation. Notwithstanding, the keen interest of the Post Office Department in aerial transportation was kept up, and during the fiscal year 1912 a total of 31 orders, covering 16 different States, were issued permitting mail to be carried on short exhibition and experimental flights between certain points. Such service was merely temporary, of course, but performed in each instance by a sworn carrier and without expense to the department. These experimental flights were continued, however, request being made on Congress for an air mail appropriation from year to year.

During the fiscal year 1916 funds were made available for the payment of airplane service out of the appropriation for steamboat or other power boat service, and in that year advertisements were issued inviting bids for service on one route in Massachusetts and on several in Alaska. No bids were received under the advertisements, due to the fact that possible bidders were unable to obtain suitably constructed planes for the proposed service. Nevertheless, negotiations with airplane manufacturers and other interested aviation activities were pushed forward, looking to the earliest possible establishment of a carefully conducted experimental air mail service. The development of the airplane in the World War and the important part it was then playing as a fighting factor in that great struggle, also served to further strengthen the belief of postal officials that it certainly could be developed into a means of fast commercial and mail transportation as well. A final step looking toward this end was taken when Congress appropriated $100,000 for the fiscal year ending June 30, 1918, to be used in the establishment of an experimental air-mail route.

Careful preliminary study and consideration had been given this new undertaking, and on May 15, 1918, the first air-mail route in the United States was established between New York, N. Y., and Washington, D. C., with a stop at Philadelphia, Pa., for the exchange of mails or plane. The distance of the route was approximately 218 miles, and the frequency of service was one round trip daily, except Sunday. This service was inaugurated with the cooperation of the War Department, which furnished the planes and pilots and conducted the flying and maintenance operations, the Post Office Department handling the mail and

matters relating thereto. The cooperation of the War Department, which was of great value, was maintained until August 12, 1918, when the Post Office Department took over the entire operation of the route, furnishing its own equipment and personnel.

Flights on regular schedule, in all kinds of weather, presented new and unsolved problems, but gradually difficulties were overcome and a very reliable percentage of performance was attained over the route. In fact, the operation of this experimental route was so successful that the department immediately began to lay plans for the extension of the service, and with a view toward the possible establishment of a transcontinental route from New York City to San Francisco. The first leg of this important route was established between Cleveland, Ohio, and Chicago, Ill., with a stop at Bryan, Ohio, on May 15, 1919, and the second leg, New York City to Cleveland, with a stop at Bellefonte, Pa., was established on July 1 of the same year.

These two latter routes were utilized to advance delivery of mail in connection with train service, and this was accomplished in the following manner. Chicago and Cleveland gateway mail was dispatched by plane from New York to Cleveland, where it was placed on trains that left New York the evening before, thus saving about 16 hours in time to the Middle West and 24 hours to the coast. Eastbound flights over this route advanced delivery of gateway mail from Cleveland to New York in the same manner. On the Cleveland-Chicago route mail from the East was taken from the train at Cleveland in the morning and flown to Chicago in time for the last city delivery, saving approximately 16 hours in time. On the eastbound trips mail was flown from Chicago to overtake the mail train at Cleveland, which reached New York at 9.40 the following morning, thereby effecting a saving in time of approximately 16 hours in the delivery of mail to New York City and the New England States.

On the three routes in operation during the fiscal year 1919 there were in the air daily eight planes, flying an aggregate of 1,906 miles each day. The record of performance during this fiscal year was 96.54 per cent, and this record was made with more than 30 per cent of the trips flown in rain, fog, mist, or other conditions of poor visibility.

On May 15, 1920, the third leg of the transcontinental route—Chicago Ill., to Omaha, Nebr., via Iowa City, Iowa—was established, performing service similar to that performed on the routes between New York and Chicago. On August 16, 1920, a route was established between Chicago and St. Louis, and on December 1 of the same year a route was also established between Chicago and Minneapolis. Both of these latter routes expedited mail between the points named and were feeder lines to mail trains and the transcontinental route at Chicago.

The last leg of the transcontinental route, Omaha, Nebr., to San Francisco, Calif., via North Platte, Nebr., Cheyenne, Rawlins, and Rock Springs, Wyo.; Salt Lake City, Utah, and Elko and Reno, Nev., was inaugurated on September 8, 1920. The initial westbound trip was made at the rate of 80 miles per hour and was flown without a forced landing, either for weather or mechanical trouble. The plane carried 16,000 letters, which arrived in San Francisco 22 hours ahead of the best possible time by train, had the train made all its connections.

Due to the necessity of economizing in expenditure, and the fact that Congress had not specifically authorized the same, the New York-Washington route was discontinued on May 31, 1921, and the Minneapolis-Chicago and the Chicago-St. Louis routes on June 30, 1921. Operation was then confined to the service between New York and San Francisco, for which appropriation was specifically made.

In order to further demonstrate the possibilities of the airplane as a factor in the transportation of the mail, arrangements were made for a through flight from San Francisco to New York, and on February 22, 1921, an air-mail plane left San Francisco at 4.30 a. m., landing at New York (Hazelhurst Field, Long Island, N. Y.) at 4.50 p. m., February 23. The total elapsed time for the trip, including all stops, was 33 hours and 21 minutes. The actual flying time was 25 hours and 16 minutes, and the average speed was 104 miles per hour over the entire distance of 2,629 miles. This flight was made possible by flying at night between Cheyenne, Wyo., and Chicago, Ill., a class of service the need of which was seen by the department. While the present relay service had been brought up to a high degree of perfection, yet it was apparent to the department that if the route could be operated from New York to San Francisco on a through schedule, flying both night and day, a wonderful stride in the development of air-mail transportation would be accomplished.

With the development of night service in mind, the department on August 20, 1920, issued orders for the installation of radio stations at each field where this service could not be provided by Navy Department stations. By November 1, 10 of these stations were in operation, including 3 belonging to the Navy Department which were to be used in connection with the operation of the air mail service, and later on stations were established at all the remaining fields except Rawlins, Wyo., making a total of 17.

From this time on all plane movements were made on information as to weather conditions obtained by radio. In addition to service messages, it was used by other departments in lieu of telegraph when air-mail traffic permitted, and was also of great service in transmitting weather forecasts and stock-market reports for the Department of Agriculture. In addition to the installation of radio stations, all the fields were being developed for night flying, and plans studied for the establishment of beacon lights between fields for the guidance of pilots.

When the service was inaugurated in 1918, Curtiss JN–4–H planes with Hispano-Suiza motors were used. Soon after the Post Office Department took over the details of operation in August of that year, a number of Standard Aircraft Co. mail planes were purchased. These were also equipped with Hispano-Suiza motors, and carried 200 pounds of mail. Rebuilt de Haviland planes with Liberty motors were largely used as the various legs of the transcontinental route were extended. However, at one time or another, planes of the following types were used somewhat extensively: Curtis JN–4–H, with Wright engine, 150 horsepower; Standard JR–1B, with Wright engine, 150 horsepower; Curtis R–4–L, with Liberty–12 engine, 400 horsepower; Curtiss HA with Liberty–12 engine; Twin D. H., with two Liberty–6 (Hall Scott) engines, 400 horsepower; Martin mail planes, with two Liberty–12 engines, 800 horsepower; Junker (JL–6), with B. M. W. engine, 200 horsepower; and L. W. F. (type V), with Isotta Fraschini 250-horsepower engines.

In the fiscal year 1921, the Post Office Department paid manufacturers $476,109 for new planes and for remodeling of planes received from the Army. This practice was discontinued beginning with July 1, 1921, however, when the air mail service adopted the DeHaviland plane with Liberty–12 engine as standard equipment, disposing of all other types. A number of factors contributed to this end. Large stocks of Liberty motors were available and could be had by transfer from the War Department. With improvements made on the Liberty motor, such as heavy stub tooth gears, drilled pistons and improved oil pump, it could be considered as reliable and dependable as any motor of that time, if not more so. A number of DeHaviland planes were also obtained from the War and Navy Departments, and when remodeled and rebuilt into mail planes, they were speedy, reliable, long lived, and capable of carrying a mail load of 500 pounds. Experience had also proven they were a comparatively safe plane to operate. The air mail repair depot was located at Chicago, and was used for repairing, remodeling, and rebuilding of planes, overhauling of motors, etc.

It might be stated here that when the service first began to use Liberty motors it was not an uncommon occurrence to have delayed and uncompleted trips due to motor trouble. However, by developing and perfecting rigid inspection, servicing and overhaul methods, actual forced landings on account of motor trouble became a rare occurrence. Due to this same system of inspection, forced landings on account of the failure of the plane or plane parts became almost unheard of.

During the spring and summer of 1923 work on a lighted airway between Cheyenne, Wyo., and Chicago, Ill., was being pushed forward with a view to carrying out certain experiments to determine whether cross-country night flying on a regular schedule was possible, and whether a through transcontinental air-mail service between New York and San Francisco could be regularly maintained. This was certainly a huge undertaking, as up to this time very little night flying had been done, and, of course, there were no lighted airways in existence. The United States Army Air Service had carried on some experiments and developed certain necessary equipment, but had attempted very little regular scheduled cross-country night flying. The Army obligingly placed at the disposal of the Post Office Department all the knowledge they had obtained from their experiments. Splendid cooperation was had at the hands of manufacturers of illuminating equipment of various kinds. The General Electric Co., the American Gas Accumulator Co., and the Sperry Instrument Co. were particularly thorough in the assistance rendered. Beacon lights were installed between Chicago and Cheyenne, planes were equipped with landing lights, emergency fields were prepared, lighted, and marked, and terminal fields lighted. Pilots were given an opportunity to make practice night flights. All arrangements were completed as planned, however, and in August, 1923, a regular schedule was flown between New York and San Francisco for a period of four days, that part of the route between Chicago and Cheyenne being flown at night. The best time eastbound on any of the 4 days was 26 hours and 14 minutes, and the best time westbound was 29 hours and 38 minutes. It may be stated, however, that better time can generally be made on eastbound trips due to the fact that the prevailing winds are from the west. The result of the test was so satisfactory, being 100 per cent perfect, that operation of a transcontinental service on a similar schedule, the first 30 days to be a trial, was decided upon.

It was also decided to charge air-mail postage at the rate of 8 cents an ounce for each zone transported, the route being divided into three zones, namely, New York to Chicago, Chicago to Cheyenne, and Cheyenne to San Francisco. Heretofore no extra charge was made for the transportation of air mail, although when the service was first established back in 1918 special stamps were issued and the rate was 24 cents per

ounce. This was later reduced to 16 cents per ounce, then to 6 cents, and due to lack of patronage was finally discontinued on July 18, 1919, the regular standard domestic rate of 2 cents per ounce being put into effect.

The remainder of 1923 and the first half of 1924 was spent in preparing for the inauguration of a regular transcontinental service, which was begun on July 1, 1924. The 30-day test was so satisfactory that the service was continued as a regular operation. The schedule required departure from the initial termini in the morning and arrival at the end of the route late in the afternoon of the next day.

Later on a considerable demand for an air mail service between New York and Chicago by a schedule which would deliver mail of one business day to the opposite termini in time for the first carrier delivery the next morning was evidenced, and to meet that demand an overnight service between these points was established on July 1, 1925.

A brief summary of the work done in connection with the inauguration of night flying will give some idea of the undertaking. In the last half of 1923 and the first half of 1924 the following special work was accomplished: 289 flashing gas beacons were installed between Chicago and Cheyenne; 34 emergency landing fields between the same points were rented, equipped with rotating electric beacons, boundary markers, and telephones; 5 terminal landing fields were equipped with beacons, floodlights, and boundary markers; 17 planes were equipped with luminous instruments, navigation lights, landing lights, and parachute flares. In addition to this the necessary organization to handle operations both in the air and on the ground was brought up to a high degree of efficiency.

The running or navigation lights on the planes were similar to those used by ships at sea, only, of course, much smaller. A red light was installed on the left wing, a green one on the right wing, and a white one on the tail. The landing lights had projectors of the automobile type, but of much higher power. One light was mounted on the left wing tip and the other on the right, usually the lower panels. Each light gave approximately 150,000-beam candlepower. Two parachute flares were installed in each plane for emergency use. These could be released by the pilot, if necessary, to locate a field in case of forced landing at night, which occasionally happens. The flare, when released, gives a light of approximately 30,000 candlepower, burns from four to seven minutes, and has a radius of illumination of approximately 1 mile at 1,000 feet altitude.

A 36-inch high intensity arc revolving searchlight of approximately 500,000,000 candlepower was installed on a 50-foot tower at the regular fields. This great beacon, set at a fraction of a degree above the horizon, revolved at the rate of three times per minute, and on clear nights could be seen by the pilots for a distance of 130 to 150 miles. An 18-inch rotating beacon of approximately 5,000,000 candlepower, mounted on top of a 50-foot windmill tower, was installed at each emergency field. This beacon was also set at a fraction of a degree above the horizon, revolved at the rate of six times a minute, and was visible to the pilots on clear nights from 60 to 75 miles. The lights from these powerful beacons guided the pilots in their lonely flights through the night and marked for them the emergency and regular landing fields. A large searchlight, similar to the 36-inch arc beacon, equipped with a lens that spread the light fan shaped over the field, was used to illuminate the terminal fields for landing purposes. These floodlights were of great assistance and served to give the pilot as nearly as possible a daylight perspective when landing upon the field. One or two large, powerful B. B. T. floodlights were purchased for the beginning of regular night flying July 1, 1924, however, and eventually were installed at all terminal night flying fields, replacing the above-mentioned 36-inch floodlight. The lens of the B. B. T. floodlight, which throws a fan-shaped beam 180° in spread, is constructed and set in such a manner that no blinding effect is encountered by the pilot when landing on the field. It is rated at approximately 3,500,000 candlepower and will floodlight an area practically 1 mile square. The emergency landing fields were located from 25 to 30 miles apart, and furnished the pilot a safe place to land in case of necessity. The boundaries of both emergency and regular fields were outlined with small white lights placed 150 to 300 feet apart, and all obstacles were marked with red lights. Local electric current was available at terminal fields, and was used to furnish power to the beacons and also through underground cable to the boundary lights. At emergency fields where local current was not available units composed of three or four primary cell batteries were used for boundary lighting, and Delco lighting plants were installed to furnish power for the rotating beacon. The plant was inclosed in a shack at the base of the tower, which also served as a shelter for the caretaker. As a matter of fact, caretaker shacks were provided for all emergency fields. The small A. G. A. gas beacons were located approximately every 3 miles in between the emergency and regular or terminal fields, and served also to guide the pilot on the route. They flashed at the rate of sixty times a minute, and received their light power from cylinders of acetylene gas, which were renewed about every five or six months. They flashed continually night and day at the start, but during the last few years of Government operation a sun valve was invented which automatically shut off the light in the daytime and turned it on again at dusk.

The lighted airway was extended eastward from Chicago to Cleveland in the summer of 1924; westward to Rock Springs, Wyo., at the same time; from Cleveland to New York in the spring of 1925; and from Rock Springs to Salt Lake City in the fall of the same year. The last two extensions involved difficulties peculiar to the country over which laid out. The Cleveland-New York section traverses the Allegheny Mountain Range, offering serious difficulty in the establishment of emergency landing fields and locations of beacon lights on mountain tops that would be both visible to a pilot flying over and accessible from the ground. The section from Rock Springs to Salt Lake City traverses the Laramie and Wasatch Ranges of the Rocky Mountains, a stretch of country that is very sparsely settled. Many changes in the lighted airway were made to make it more efficient as time went on. Additional lights were installed, providing a powerful rotating beacon approximately every 15 miles; the 18-inch beacons were replaced with 24-inch beacons at practically all points, and one was also installed on top of the tower which supported the 36-inch beacon at the terminal fields. between Chicago and Cheyenne, thereby making it possible to limit the use of the 36-inch beacon to times when the weather was extremely bad. Emergency fields were improved and at a number of additional points local current was extended to the field. Experiment was made with wind-driven electric plants and several of them were successfully installed at points west of Chicago. These lighting plants, with power generated to large capacity storage batteries by a wind-driven propeller, were turned on at dusk and off at daylight by torque clocks or sun relays, thus eliminating the expense of having a caretaker employed. A number of other fields where local current was available were also made to be automatically controlled by the use of such instruments. The installation and illumination of this giant airway from New York City to Salt Lake City, a distance of some 2,045 miles, was accomplished at a cost of approximately $542,000.

In view of the steady increase in mail loads, augmented by the establishment of several contract feeder routes in the early part of the year 1926, it became apparent to the department that a plane carrying a much larger load than the de Haviland was necessary. Competition among various aircraft manufacturers was invited, and as a final result 51 Douglas mail planes were purchased, deliveries starting in the month of May, 1926. These new planes were capable of carrying more than twice the load carried by the de Haviland and also had considerable more speed. As a matter of fact, trips between certain points were made at the rate of 150 to 160 or more miles per hour, but these were quite infrequent, however, and only when a stiff tail wind was in evidence. The record mail trip between Chicago and New York City was made on December 16, 1926, at the rate of 167.5 miles per hour. The fastest mail trip on record was made on January 30, 1927, between Chicago and Cleveland, at the rate of 175.1 miles per hour. The greater cruising radius and speed of the Douglas planes permitted the discontinuance, except possibly in adverse weather conditions, of stops in both directions at Bellefonte, Bryan, and Rawlins, and on eastbound trips at Iowa City, North Platte, and Rock Springs. An important change in the eastbound transcontinental schedule was also made possible, allowing 1 hour and 15 minutes later departure from the New York termini. The new planes were put into use between Salt Lake City and New York City, where mail loads were heaviest, the de Havilands being used from Salt Lake City west. The building of de Haviland planes at the repair depot was discontinued on July 1, 1926, work of that nature being confined from then on to the repairing of old de Havilands and damaged Douglas planes. The surplus de Havilaud planes released were advertised and sold.

An important step bearing on the development of air-mail traffic was taken by the department on February 1, 1927, when a new postage rate of 10 cents per half ounce was put into effect, thereby entirely doing away with the complicated zoning system previously in use on the transcontinental and contract routes. The new flat rate entitled transportation between any points in the country, without regard to distance, and was a valuable means of increasing patronage.

The air-mail service was awarded the Collier trophy for the most important contributions to the development of aeronautics in the year 1922, on its outstanding record of safety established, and again in the year 1923, for demonstrating the practicability of night flying. The Harmon trophy of the United States, offered for the first time in the year 1926, was awarded by the International League of Aviators to an air-mail pilot—because of his remarkable record of having flown during that year over 718 hours without accident, in all kinds of weather, both winter and summer, on regularly assigned trips, 47 per cent of the time being flown at night. It may be stated that in the award of the Harmon trophy the wonderful day-in-and-day-out flying record of the air-mail pilot was considered more meritorious in the cause of advancing aviation than the flight made during that year by Commander Byrd over the North Pole.

It had never been the intention of the Post Office Department, however, to operate the air-mail service longer than was necessary to

clearly demonstrate the practicability of commercial aviation to the general public, and thereby induce private enterprise to enter the field and eventually take over the operation of service. Due to the large measure of success attained in the efficient operation and development of the transcontinental route, the desired interest was rapidly increasing and in the year 1926 several contract air-mail routes were put into operation, and contracts on several more routes awarded. Interest in commercial aviation, and contract air-mail service in particular, was further enlivened when in the spring of 1926 Congress passed a bill, known as the air commerce act of 1926, which, briefy stated, imposed upon the Secretary of Commerce the duty of fostering the development of commercial aviation in the United States. It authorized the Secretary of Commerce, among other things, to designate and establish airways, in so far as funds were made available by Congress from year to year, and to establish, operate, and maintain along such airways all necessary lights and emergency landing fields. It also provided that at such time as the Postmaster General and Secretary of Commerce by joint order should direct, the airway under the jurisdiction and control of the Postmaster General, together with all emergency landing fields and other air facilities (except air ports or terminal landing fields) used in connection therewith, would be transferred to the jurisdiction and control of the Secretary of Commerce, the established air ports or terminal landing fields to be transferred to the jurisdiction and control of the municipalities concerned under arrangements subject to approval by the President. Taking all these happenings into consideration, the Postmaster General concluded that the time was fast approaching, or was actually at hand, when the transcontinental air-mail route might be turned over to private contractors and operation successfully and profitably carried on by them.

In order to ascertain the response that would be made, advertisements were issued on November 15, 1926, to expire on January 15, 1927, for proposals for service on the transcontinental route by sections—(1) New York to Chicago and (2) Chicago to San Francisco. A proposal at a satisfactory rate was received on the Chicago to San Francisco section from the Boeing Airplane Co. and Edward Hubbard, of Seattle, Wash. (later incorporated as the Boeing Air Transport, Salt Lake City, Utah), and accepted. Service began under their contract July 1, 1927, the Post Office Department relinquishing operation at midnight June 30. As no satisfactory bid was received for the service between New York and Chicago, that section of the route was readvertised under date of March 8 and the bid of the National Air Transport (Inc.), Chicago, Ill., accepted thereunder. This company began service under their contract on September 1, the Post Office Department continuing operation up until that time.

In addition to turning over to the contractor operation of service between Chicago and San Francisco on July 1, 1927, another important event in the history of the Government-operated air mail service took place on that date when, acting under legislation contained in the air commerce act above referred to, the lighted airway and the radio service were transferred to the jurisdiction and control of the Department of Commerce. The transfer of the radio service included 17 fully equipped stations, with an operating personnel of 44. Transfer of the lighted airway included an operating personnel of approximately 102 and the following fields and lights:

Emergency landing fields with caretakers in charge	68
Emergency landing fields automatically operated (no caretakers)	21
Electric beacon lights in between emergency fields with caretakers in charge	21
Electric beacon lights in between emergency fields automatically operated	79
A. G. A. gas routing beacons (automatic)	405

Arrangements were made for the transfer of terminal airports to the municipalities at which they were located very shortly after the relinquishment of service on the western part of the route, and the same procedure was followed after relinquishment of service on the eastern part. The buildings at Chicago were located on property owned by the United States Veterans' Bureau and at Omaha and San Francisco on property owned by the War Department. Ownership of these buildings therefore reverted to the Government departments named.

A number of the new Douglas planes were sold to air-mail contractors, and the balance, together with the few remaining serviceable DeHavilands, were transferred to other Government departments in need of such equipment. Considerable of the shop material and equipment could be advantageously used in the large post-office garages, and transfer was accordingly made. The remaining serviceable material, equipment, etc., was listed to the Chief Coordinator for clearance and that desired by other Government departments was accordingly transferred. The material and equipment not taken by other branches of the Government was listed for sale and sold in the usual manner to the highest bidder. By December 31, 1927, the department's interests were completely closed out at all fields except Chicago, where only a small quantity of the material and equipment located in the repair depot and warehouse remained to be disposed of.

The Post Office Department has reason to be proud of the development of its undertaking, and the following tables will clearly illustrate some of the work accomplished from the beginning of service to its complete relinquishment, August 31, 1927. From the statement on performance will be noted the remarkable percentage of scheduled miles flown, and in this connection it may be stated that if it were not for severe weather conditions, especially met with during the winter months of the year, such as fog, sleet, and blizzards, an almost perfect schedule could be maintained at all times. Of course, weather that it was considered impossible to fly through in the early stages was easily flown through during the last few years, but fog still remains the greatest enemy of the pilot and the cause of practically all serious delays and uncompleted trips. Short areas of fog are flown through or over, but it is not practicable to fly through or over large areas of dense fog, requiring designated landings to be made therein, with our present equipment and instruments. However, experiments are being continually carried on with a view to finding some effectual means of overcoming this hazard, and it is hoped that such means will be found within the not too far distant future. Attention is also called to the wonderful record of safety established during the later years of operation, as shown in the statement of fatalities, etc. A total of 3,108,720 miles were flown before the last fatality occurred.

Statement of performance from the beginning to the end of Government-operated service May 15, 1918, to and including August 31, 1927

Fiscal year ending June 30—	Miles mail trips scheduled	Miles mail trips actually flown	Percentage scheduled miles flown	Miles flown ferry and test	Total miles flown mail ferry and test	Forced landings (mail trips)		Number letters carried (40 per pound)
						Mechanical	Weather	
1918	18,000	16,009	84	5,380	21,389	6	6	713,240
1919	166,843	160,066	96	34,920	194,986	37	56	9,210,040
1920	653,764	549,244	84	99,156	648,400	155	105	21,063,120
1921	1,819,978	1,554,935	86	215,673	1,770,658	810	954	44,834,080
1922	1,629,250	1,537,927	94	189,338	1,727,265	281	479	48,988,920
1923	1,644,457	1,590,637	96	218,391	1,809,028	176	279	67,875,840
1924	1,590,425	1,522,763	95	330,488	1,853,251	154	353	60,001,360
1925	2,160,022	2,076,764	96	424,791	2,501,555	174	586	[1] 9,300,520
1926	2,405,059	2,256,137	94	291,855	2,547,992	155	707	[1] 14,145,640
1927	2,482,865	2,329,553	95	253,453	2,583,006	140	881	[1] 22,385,000
1928 [2]	179,304	173,987	97	21,725	195,712	7	31	[1] 3,338,080
Total	14,749,967	13,768,072	93	2,085,170	15,853,242	2,095	4,437	301,855,840

[1] Only mail with postage prepaid at the higher or special air-mail rate was carried in 1925, 1926, 1927, and 1928.
[2] Operated by the Post Office Department between New York and Chicago only, during the months of July and August, 1928.

Statement of fatalities, injuries, and plane crashes from the beginning to the end of Government-operated service May 15, 1918, to and including August 31, 1927

Fiscal year	Total number of fatalities		Average miles flown for each fatality	Number injured			Planes crashed	Average miles flown per crash
				Minor	Serious			
					Flight	Ground		
1918			[1]					
1919		3	64,995	2	1	0	13	14,999
	Pilots	2	97,493					
	On ground	1	194,986					
1920		9	72,044	12	1	1	33	19,648
	Pilots	5	129,680					
	Passengers	4	162,100					
1921		17	104,156					
	Pilots	12	147,554	33	1	2	56	31,618
	Passengers	4	442,664					
	On ground	1	1,770,658					
1922	Pilot	1	1,727,265	33	1	3	17	101,604
1923		4	452,257	27		2	12	150,752
	Pilots	3	603,009					
	Passenger	1	1,809,028					
1924	Pilots	4	463,312	41	1	5	14	132,375
1925	Pilots	2	1,250,777	46	2	3	12	208,463
1926	Pilots	2	1,273,996	59	2		9	283,111
1927	Pilot	1	2,583,006	51	2	9	33	78,272
1928			[1]	4			1	195,712
Total		[2] 43	[3]	308	11	25	200	79,266

[1] No fatality.
[2] 32 fatal crashes; 32 pilots and 9 employees who accompanied pilots on flights killed; 2 employees killed on ground by propellers.
[3] Average miles flown for each fatal crash, 495,414; average miles employee killed in flight, 386,665; average miles flown for each fatality (flight and ground), 368,680.

During the period between the last fatality, April 22, 1927, and the previous one, February 12, 1926, a total of 3,108,720 miles were flown.

Statement showing appropriations and expenditures for operation and maintenance of the air mail service from the beginning to the end of Government-operated service, May 15, 1918, to and including August 31, 1927

Fiscal year	Air mail appropriation	Total amount expended	How expended					Value of property inventory at close of year
			Wages and salaries	Pilots' mileage pay	Building and field improvements	Gasoline and oil	Other supplies and service	
1918	$100,000	$13,604						
1919	100,000	717,177						
1920	850,000	1,264,495						
1921	1,375,000	2,653,882						
1922	1,425,000	1,418,146	$548,101	$92,891	$29,222	$181,204	$563,749	$2,560,018
1923	1,900,000	1,897,151	676,945	101,327	473,796	186,360	458,723	2,861,492
1924	1,500,000	1,498,674	759,304	107,739	32,336	160,081	436,536	3,246,385
1925	2,750,000	2,743,750	1,059,384	174,743	163,707	226,998	1,118,918	3,506,534
1926	2,885,000	2,782,422	1,180,595	197,496	294,298	232,738	877,295	3,816,679
1927	2,650,000	2,255,919	991,528	205,180	24,655	201,255	833,301	3,345,641
1928	2,150,000	166,314	121,137	16,707	None.	11,453	17,017	(1)
Total	17,685,000	17,411,534						

[1] No property.

In the fiscal years 1919, 1920, and 1921 appropriations made for star-route, power-boat, and railroad service were used by the air-mail service.

The records for the fiscal years 1918 to 1921, inclusive, were so kept that it would be difficult to itemize the expenditures.

An inventory was not taken until the close of the fiscal year 1922.

Statement showing pilots in service at discontinuance of Government-operated route, with dates of their original appointment, and total number of miles and hours flown

Pilot	Date of original appointment in service	Date of last flight	Total number of hours flown	Total number of miles flown
Allen, Edmond	July 10, 1925	June 29, 1927	1,126.34	109,669
Allison, Ernest M	Aug. 23, 1920	June 27, 1927	3,806.16	359,793
Barker, Hugh	Jan. 4, 1924	June 13, 1927	1,794.22	170,073
Barnes, J. M	Aug. 24, 1924	July 14, 1927	1,452.02	139,458
Bertaud, Lloyd W	Nov. 16, 1924	July 2, 1927	1,443.19	141,806
Biffle, Ira O	Dec. 9, 1918	June 28, 1927	1,962.37	193,515
Boonstra, Harry G	Mar. 14, 1921	June 27, 1927	3,238.49	303,428
Bowen, L. L	July 10, 1925	Apr. 5, 1927	946.07	93,949
Brown, Henry J	Jan. 12, 1925	Aug. 31, 1927	1,425.17	151,166
Burnside, Frank H	July 17, 1923	do	1,479.10	147,885
Chandler, Harry A	Aug. 16, 1920	Aug. 30, 1927	4,132.22	394,605
Collins, Paul F	Feb. 12, 1921	Aug. 31, 1927	3,587.00	361,689
Collison, H. A	May 27, 1921	June 19, 1927	3,482.17	331,474
Ellis, Robert H	July 7, 1919	June 28, 1927	3,388.02	347,518
Hill, James D	July 1, 1924	July 11, 1927	1,928.36	202,027
Hopson, William C	Apr. 14, 1920	Aug. 27, 1927	4,043.25	413,034
Huking, Harry	May 3, 1920	June 30, 1927	2,509.17	228,850
Johnson, C. Eugene	Mar. 10, 1921	June 8, 1927	2,525.28	239,356
Johnson, Ralph J	Aug. 25, 1924	June 26, 1927	1,492.00	140,520
Kaufman, Stephen T	July 1, 1925	Aug. 31, 1927	1,503.51	149,040
Knight, James H	June 25, 1919	June 30, 1927	4,282.54	417,072
Lee, Eber H	Dec. 29, 1918	June 28, 1927	4,220.43	382,426
Levisee, Rexford B	Nov. 9, 1920	June 30, 1927	3,365.25	320,889
Lewis, Harold T	May 27, 1919	June 29, 1927	3,840.21	365,625
McGinn, Leo J	May 10, 1923	Aug. 31, 1927	593.58	60,937
Maroney, Edward S	Aug. 11, 1921	June 30, 1927	375.09	35,527
Marshall, Tex	Sept. 21, 1920	June 22, 1927	3,675.08	329,152
Mouton, E. E	Sept. 8, 1920	May 22, 1927	3,805.54	369,730
Murray, James P	June 8, 1920	July 11, 1927	4,380.46	400,611
Myers, Geo. L	June 1, 1923	Sept. 9, 1927	2,782.29	281,114
Pomeroy, Geo. C	Aug. 16, 1924	Aug. 4, 1927	1,649.24	155,123
Sharpnack, J. W	Sept. 8, 1920	June 9, 1927	2,256.41	217,212
Short, Shirley J	Mar. 2, 1923	Aug. 31, 1927	2,841.43	284,552
Smith, Dean C	May 21, 1920	Aug. 28, 1927	3,764.57	365,719
Smith, Harry G	Aug. 31, 1920	Aug. 29, 1927	2,770.11	265,164
Smith, W. L	Nov. 8, 1919	June 15, 1927	4,029.26	391,686
Vance, C. K	Apr. 22, 1920	June 30, 1927	2,811.58	268,094
Wagner, R. L	Apr. 23, 1923	do	2,345.24	235,551
Ward, Earl F	Dec. 21, 1923	Aug. 31, 1927	2,166.08	226,722
Webster, J. O	Jan. 3, 1921	do	1,444.24	132,986
Williams, W. D	Aug. 10, 1920	Aug. 29, 1927	4,336.05	424,294
Winslow, B. H	Sept. 22, 1920	June 30, 1927	2,885.57	256,553
Yager, F. R	Aug. 10, 1920	June 27, 1927	4,009.14	391,616

Mr. BYRNS. Mr. Chairman, I yield to the gentleman from Alabama [Mr. HILL].

Mr. HILL of Alabama. Mr. Speaker, at our last session the Congress passed the bill which made possible the erection by the Republic of Panama of a great laboratory in that country at a cost of half a million dollars to search out the cause and cure of tropical diseases, to be maintained in part by an annual appropriation of $50,000 by the Government of the United States and to be named the Gorgas Memorial Laboratory in commemoration of the life and work of that great physician and great American, William Crawford Gorgas. I have read with much interest the recent report of the Gorgas Memorial Institute and it is most gratifying to note the progress made in connection with the establishment of the Gorgas Memorial Laboratory. The appointment of Dr. Herbert C. Clark, a distinguished authority on tropical medicine, to the directorship of the laboratory and the friendly cooperation of the Government of Panama evidenced by its turning over to the institute the magnificent building erected for the school of medicine are two outstanding accomplishments of the memorial institute in connection with the preliminary arrangements for the establishment of the laboratory.

It was in the little town of Toulminville, a suburb of the historic old city of Mobile in Alabama, the State which I have the honor to represent, that on the 3d day of October, 1854, William Crawford Gorgas was born, the son of Gen. Josiah Gorgas and Amelia Gayle Gorgas. Gen. Josiah Gorgas served as chief of ordnance of the Confederate Army during the War between the States, was for 10 years president of the University of the South at Sewanee, Tenn., and later president of the University of Alabama at Tuscaloosa, Ala. Mrs. Amelia Gayle Gorgas was the daughter of Hon. John Gayle, who was Governor of Alabama and afterwards a Member of Congress and a United States district judge. When I entered the University of Alabama as a student in the fall of 1911 I soon came to know Mrs. Amelia Gayle Gorgas. For many years she had been the librarian of the university library. Her lovely old home in the very heart of the campus was the rendezvous for the students who came and went with the passing years. She was their kindest critic, their wisest counsellor, their best friend, known by all and loved and revered by all, the mother of the university campus. The magnificent new university library is the Amelia Gayle Gorgas Library, named as a tribute of love and of appreciation of the life, the service, and the faith of this noble woman. During my university days Miss Mamie Gorgas, General Gorgas's sister, was the assistant librarian at the university library. Her kindly manner, her gentle spirit endeared her to all. Many were the proud and happy moments we spent together in talking of her great brother and his great work. Upon our entrance into the World War, when I was examined and rejected for admission to the Army on account of underweight, my underweight was waived through the good offices of General Gorgas, then the Surgeon General of the Army, and my heart's desire found realization by my admission to the Army.

Profane history tells us of Alexanders and Cæsars and Napoleons who came with the blare of trumpets, the clash of arms, and the thunder of armies, establishing dynasties and empires which endured for a time and then swayed, tottered, crumbled, and fell forever. Sacred history tells us of the silent Nazarene, who came without the pomp and pageantry and circumstance of temporal monarchs and through the silent influences emanating from His own perfect life and character established a kingdom as wide as the universe and as lasting as eternity. The future historian will tell of William Crawford Gorgas, patient and devoted man, who walked in the footsteps of the Great Physician and whose life of humility, service, and sacrifice brought more blessings to mankind than all the kings and conquerors and empire builders.

In the hidden wastes of the Tropics there lurked an enemy, silent but inexorable, that made them the white man's sepulchre. From its home in the Tropics this same yellow fever often journeyed forth into the cooler climate of the Temperate Zone, leaving in its wake a trail of woe, of terror, and of death. In 1793 the dread disease ventured even as far north as Philadelphia and with terrible suddenness fell upon that city. There was scarcely a home that was not afflicted; the rich quarters as well as the poor abounded in the disease; the clean as well as the filthy, and all ages and colors rendered their tribute. In a few brief weeks one-tenth of the population was dead. In that most interesting and enlightening volume, William Crawford Gorgas, His Life and Work, the colabor of his widow, Mrs. Marie D. Gorgas, and Hon. Burton J. Hendrick, we find this interesting account of conditions in Philadelphia during the epidemic:

> In a few days the city was in a state of the wildest disorder. As usual, all fled who could get away; for weeks there was a continuous procession of carts, coaches, wagons, and "chairs" transporting families and furniture in all directions; in the towns to which the refugees went they were most unwelcome visitors, and in many cases they were turned back at the gate. All phases of business and community life came suddenly to an end; banks closed; factories shut their doors, leaving thousands without employment; newspapers stopped publication, and churches ceased their functions for want of congregations. Sick persons sometimes fell dead in the streets, their corpses lying for weeks without burial * * *.
>
> The most distinguished citizens were buried unceremoniously, with no human attendant except the negro who drove the death cart. The appearance of anything that resembled such a funeral was a signal for

the population to flee in all directions. In many cases husbands abandoned their sick wives and wives their sick husbands; instances were not unknown in which parents fled from their children and children left their parents to die in neglect. The afflicted were sometimes left to perish miserably without medicine or a drink of water, and even women in childbirth frequently received no care. One writer records as an evidence of the state of the popular frenzy that had ruled all summer the delight with which the populace looked upon a conventional funeral proceeding in leisure and dignity through the streets. It had for so many months been the custom to hustle off unattended corpses at midnight or to leave them unburied in vacant lots that even this somber manifestation of normal existence was a cause for general rejoicing.

The famous Dr. Benjamin Rush and Matthew Carey have left accounts of the epidemic which have a strong resemblance to Defoe's description of the great London plague of 1664–65. There was not a year in the nineteenth century during which this unknown and impalpable enemy did not claim its victims in many American cities. Particularly did the cities on the Gulf coast, such as New Orleans, Mobile, and Pensacola, many times satiate the voracious appetite of this unholy plague.

In 1880 yellow fever in its most violent form was exacting heavy toll of the people of Brownsville, Tex. Gorgas, then a young lieutenant in the Medical Corps of the Army, volunteered to go to the stricken area and was sent to Fort Brown, at Brownsville, to assist in the medical care of the civilian population. Here fate seemed to ordain him as her own and to prepare and equip him for the high destiny which was his. Here he met for the first time Miss Marie Cook Doughty, whom he attended while seriously ill with yellow fever and whom he later married. As his wife, his silent partner through the years, her unfaltering faith and appreciation encouraged him to do and to become, her devoted care and loving hands helped the master work out his noble plan. Here he himself fell a victim to the dread disease and thereby became immune to it for the rest of his life.

In 1898 Gorgas was appointed chief sanitary officer at Habana. In 1900 there came to Habana the immortal four, Walter Reed, James Carroll, Jesse W. Lazear, and Aristides Agramonte, the commission charged by the Government of the United States with solving, if possible, the baffling and perplexing problem of the cause of yellow fever. This commission headed by Major Reed, himself a southerner like Gorgas, using the elaborate statistical study of the spread of yellow fever in houses made by that other great Southerner, Dr. Henry R. Carter, of the United States Public Health Service, and the mosquito theory of infection, as advanced by Dr. Carlos J. Finlay, of Habana, while armed with the knowledge brilliantly demonstrated by Sir Ronald Ross that the Anopheles mosquito was the infecting agent in malaria fever, after months of devoted work crowned with wonderful self-sacrifice and marvelous self-abnegation in which the young, the brilliant, the gallant Lazear gave his life, definitely demonstrated that the Stegomyia mosquito was the infecting agent in yellow fever.

If it is the mosquito—

Said Gorgas, when the Reed experiments were under way—

I am going to get rid of the mosquito.

Even Reed himself smiled at the idea.

It can not be done—

He said, and his opinion was the one that generally prevailed in Habana at that time. Most scientists regarded Reed's indictment of the Stegomyia mosquito as merely a brilliant academic performance. They could not see how it greatly lessened the general yellow-fever peril. In fact, Reed seemed to have reduced the situation to one of utter despair. He had proved that the Stegomyia conveyed the disease; but how could the Stegomyia be controlled except by destroying him—a seemingly impossible task. Mosquitoes existed not by the thousands or millions but by the uncountable billions. Every environ in Habana was full of them. They swarmed in the streets, the alleyways, the byways, the houses, in every conceivable place in the city. Often they settled over the city like a hideous cloud. As has been well said:

The Reed discovery came almost like a sentence of death. Habana always had had yellow fever and now it seemed certain that Habana would always have it. To run around the city attempting to banish the disease by killing these gnats—what occupation could seem more useless and more ludicrous? One might as well attempt to banish the air in which the mosquitoes passed their brief destructive existence. What Reed had apparently accomplished was to add a new horror to daily existence.

In spite of the doubts, the fears of those about him, in the face of the laughter and the jibes of scientists, notwithstanding the oppression of the seemingly hopelessness of the task, the quiet, devoted sanitary officer of the city set himself with indomitable resolution and religious fervor to the destruction of the Stegomyia. He cleaned up the pest holes, the hidden waste, the unclean places, the foul dens of the city, and by the use of kerosene and petroleum rendered uninhabitable to the Stegomyia its breeding places. With his sanitary methods he swept through the city, cleaning and purifying it like the River Alpheus through the Augean stables. He drove the Stegomyia before him like the withered leaves before the autumn gale. In the brief time of seven and one-half months Gorgas delivered the city from the Stegomyia and lifted the pall that had hung over it for 140 years. For all these years there had not been a day when yellow fever had not prevailed in Habana. To-day Habana is healthier than the average American city. It stands the proud capital of a treasure-laden isle, a great city freed from dread disease, one of the most beautiful of all the world, whose charm is the delight of all privileged to enjoy the hospitality of its people, with argosies of commerce bound for its harbor, and an admiring America rejoicing in its happiness and its glory—a living and eternal monument to the wonder and the genius and the faith of William Crawford Gorgas. What had been done in Cuba could be done in other disease-ridden countries; what had been accomplished with yellow fever could be accomplished with other similar plagues. The Tropics with their hidden treasures, believed through the centuries incapable of habitation by the white man, were now shown to be habitable to him. The redemption of these mighty territories lay in the offing, and it was Gorgas who had proven that that redemption was possible. He now dedicated himself to the great task of the redemption.

In 1904 the United States Government undertook the stupendous task of the construction of the Panama Canal. A few years before the French Panama Canal Co. had attempted the task only to find its money, its efforts, its hopes, lost in utter failure. The French company had the skill, it had the ambition, it had the money, it had everything but one thing, and that was the genius of a Gorgas. In 1885 in writing about Panama, the historian, James Anthony Froude, said:

There is not perhaps now concentrated in any single spot so much swindling and villainy, so much foul disease, such a hideous dungheap of physical and moral abomination. The Isthmus is a damp, tropical jungle, intensely hot, swarming with mosquitoes, snakes, alligators, scorpions, and centipedes; the home even as nature made it of yellow fever, typhus, and dysentery.

At one time the French company brought to Panama 500 young engineers, put them to work in the swamps, and not one of them lived to draw his first month's pay. The pestilence of the swamp and the disease of the jungle had written the final chapter of the French company in terms of dismay, disaster, and death. It was within the shadow of these failures, haunted by their ruins, beset by the same implacable enemies that had brought them about that Gorgas found himself in 1904 as the chief sanitary officer of the Canal Zone charged with the gigantic task of conquering these enemies and making possible the construction of the canal. Within less than two years after he obtained the necessary help and supplies he exterminated the mosquitoes, eradicated yellow fever and malaria, cleaned up the Canal Zone, and made possible the building of the canal. Some Vergil will weave the incomparable story of Gorgas's triumph into a new epic—an epic of the jungle, of the fury and fatal power of its denizens—an epic that will tell of the tact, the patience, the perseverance, the courage of its hero handicapped by his own Government, opposed and thwarted at times by the officials of that Government whose very lives lay in his hands and whose help should have been his staunchest and best support, and in this epic the reader will find—

the modern realization of the legend of Heracles, the cleanser of foul places and the enemy of evil beasts.

Of Gorgas's wonderful achievement in Panama, Sir William Osler, at the time regius professor of medicine at Oxford, said in his famous Edinburgh sermon on Man's Redemption of Man:

There is nothing to match it in the history of human achievement. Before our eyes to-day the most striking experiment ever made in sanitation is in progress. The digging of the Panama Canal was acknowledged to be a question of the health of the workers. For four centuries the Isthmus had been the white man's grave. * * * Here is a chapter in human achievement for which it would be hard to find a parallel.

In 1907, in recognition of the great work he was doing, Gorgas was made a member of the Isthmian Canal Commission, and in 1915 Gorgas and his associates on the commission were given a vote of thanks by Congress for the distinguished service ren-

dered in the construction of the Panama Canal. This is one of the few instances in history since Hippocrates was awarded a civic crown by the citizens of Athens for averting a pestilence from that city that sanitary achievement has been recognized by the State.

When the United States entered the World War Gorgas was the Surgeon General of the United States Army. With that vision and prescience that had signalized his every endeavor he had been preparing for months for the inevitable conflict.

His administrative genius and medical foresight were well illustrated by his plan of strict physical examination of all men drafted. "I want to give you a fit Army, Mr. Secretary," he told Secretary of War Baker. His plan for this involved the most spectacular method of wholesale examination of human machinery in the history of the world. Every one of the 7,000,000 men who were called under the draft underwent a thorough examination by a group of doctors, specialists in the various fields. The eyes, the heart, the teeth, the feet, the nerves, the entire body machine had to be right before this Gorgas Board would certify the applicant ready for service. Nearly 30 per cent of those examined were rejected for physical disability. Of those accepted, many had incipient disabilities which were remedied. In every previous war in which our country had engaged it was the ravages of disease rather than the bullets of the enemy that had stricken down brave men and swelled the casualty lists. Under the guiding hand and the devoted leadership of General Gorgas as Surgeon General we mobilized, trained, transported 3,000 miles to Europe, and put into action the greatest army we ever had with a smaller death rate than had hitherto been known in the annals of military medicine. When the American Army commenced its great advance in July, 1918, at Chateau-Thierry it was able to continue the terrific drive without cessation until it crowned the American standards with victory on the heights of Sedan the following November because Gorgas had filled that army with the strongest and the best of America's manhood and had then safeguarded and protected them from the ravages of disease. As William Crawford Gorgas had made possible the building of the Panama Canal, he likewise made possible the brilliant triumph of American arms on the western front. With Wilson and Pershing, Gorgas must take his place as one of the great leaders of that great conflict.

During the course of the war when millions of young men were passing in review before draft medical boards, some being rejected, others being advised of minor defects which could be remedied, and all of them impressed with the message of personal hygiene, General Gorgas said one day to one of his aides:

> What an example it would be after this war in times of peace if we could get a voluntary system which would provide such an examination for all the citizens of our country once a year. A periodic health examination would be a wonderful means of keeping our people well.

Out of this dream of Gorgas, with its vision of a plan to add to the health power of the Nation, has come the Gorgas idea of better personal health through an annual check-up by the family doctor. In his name, and honoring his memory and achievements and medical genius, has been established the Gorgas Memorial Institute of Preventive and Tropical Medicine; a great organization dedicated to added research in tropical medicine, but also pledged to a tremendous educational campaign for better personal health.

Prevention of disease! Here is the keynote of Gorgas's life, and its application to problems of health in this day would account for a remarkable progress in life-saving. It is said that 50 per cent of the men and women in this country over 40 years of age will die within the next 15 years of preventable diseases—one-third of them from heart diseases, preventable if gotten at in their incipiency; one-third of them of kidney disease, preventable if cared for in the early stages; one-third of them from cancer, also preventable if the cancer is discovered at the outset. It is estimated by health authorities that the annual health examination, with its early discovery of incipient dangers and its message of individual hygiene, as a means of prevention, would add from 5 to 10 years to the average life expectancy.

From the time of his great success in Habana and particularly after his world-famous achievement in Panama, General Gorgas was appealed to by nearly every disease-ridden country of the world to come and liberate it as he had liberated Habana and the Isthmus of Panama. From time to time when he could get away from his duties for a short period he obtained temporary leave of absence and went to Ecuador, Peru, Colombia, Brazil, Venezuela, South Africa, and other countries, ever fighting disease, ever waging war on pestilence, ever laboring, ever serving suffering humanity. After his retirement from the Army at the age of 64, he was selected as chief of the Rockefeller Yellow Fever Foundation, and in that position, at the time of his death, he was working out the plans and laying the strategems to rid the entire world of the dread disease. In General Gorgas's life were mirrored the virtues of his great profession, the medical profession, that asks not whence its patient comes nor whither he goes; that knows not race nor class nor creed; that makes no demands and needs no assurances; that lets no call go unanswered from its door; that ministers to the sick, the diseased, and the suffering; that blesses them, eases their pain, soothes their sorrows, dries up their tears, and breathes hope into their despairing hearts.

General Gorgas was the whole world's physician. The debt the world owes him can never be computed. Diseases which he exterminated and which at the time were indigenous to a particular country or to the Tropics to-day with modern transportation, with modern lines of communication, with all the world neighbors, might well travel the globe and pile the corpses of their victims even to the ends of the earth. "The saviour of the Tropics" was to a degree beyond human ken the protector of the world.

On May 8, 1920, in company with his devoted wife and his official staff, General Gorgas set sail for London whence, at the invitation of the British Government, he was going to investigate yellow-fever conditions on the West Coast of Africa. He fell ill in London on May 30. Previously King George had made an appointment to see him at a subsequent date, and when the King learned of his illness he said, "If General Gorgas is too ill to come to the palace to see me, I shall go to the hospital to see him." The Sovereign of the British Empire visited the hospital and presented to the general the insignia of Knight Commander of the Most Distinguished Order of St. Michael and St. George. This was but one of the many honors and decorations that came to General Gorgas from the rulers and governments of many of the great nations of the earth in recognition of his services to the cause of humanity.

On the 4th day of July, 1920, in London, William Crawford Gorgas, tired and worn, peacefully and quietly slipped out of the company of living men and went home to the Great Physician. At the command of the King and by order of the British Government, a state funeral with full military honors was accorded him in St. Paul's Cathedral, London, the resting place of England's greatest naval and military heroes. It was one of the greatest and most impressive funerals in England in modern times. Representatives of the King and the royal family, the British cabinet ministers, leading statesmen, high officials and officers of the British Army and Navy, the diplomatic corps representing the great nations at the Court of St. James, and representatives of the leading medical and other scientific institutions attended and paid homage to the great man. Hundreds of thousands of people thronged the streets and with bared heads reverently attested their appreciation of him who had contributed so much to suffering humanity.

The great papers and periodicals of the British Empire voiced their tribute of appreciation and beautifully and eloquently told of General Gorgas and his work. As one said in describing his funeral:

> And the other day he rode up Ludgate Hill, sleeping his last sleep on earth, wrapped in the Stars and Stripes. There were thousands of men and women and children standing still, there were hundreds of men in khaki passing by, there were ambassadors and other great people and the lonely woman who was on her way with her hero to conquer disease when death took him from her. And there was the riderless horse. All these came up Ludgate Hill, and as the sun poured down on this ancient way, our hearts and ears throbbing with the solemn music of the Dead March, we knew that we were looking on the passing of a man whose name would shine for ages in the history of our race. It seemed good that death should find him here, for so there came our opporunity to do a great man honor. He passed through the great door through which the sun streams into the nave of St. Paul's, and there he lay with Nelson and Wellington and all that mighty host who came this way and passed into the universe. They will take him to his own land, but in truth he belongs to us all. He was one of life's great helpers, for he cleaned up foul places and made them sweet, and now he belongs to the ages.

General Gorgas's body was brought back to his own country, where he was given its greatest honors and where they laid him to rest in Arlington, the Valhalla of America's heroic dead. There he sleeps on the slopes of the historic Potomac, beneath the folds of Old Glory, within the shadow of the Capitol of the Nation he loved and served so well. France has her Louis Pas-

teur, England has her Joseph Lister, and America has her William Crawford Gorgas. Patient and devoted man, servant of all peoples and of the most-high God, let his people, the American people, through their Government build a fitting memorial to him, a memorial that will carry on his great and beneficent work. "He served the human lot to raise and won a name that endless ages praise."

Mr. Speaker, as an additional part of my remarks on General Gorgas I insert in the RECORD the following concise biography of him, furnished me by the Gorgas Memorial Institute:

I. BIOGRAPHY OF WILLIAM CRAWFORD GORGAS

William Crawford Gorgas was born in Mobile, Ala., on October 3, 1854. He was the son of Gen. Josiah Gorgas, the chief of ordnance of the Southern Confederacy during the Civil War and later the president of the University of the South, at Sewanee, Tenn. His mother was Amelia (Gayle) Gorgas, daughter of Governor Gayle, of Alabama.

Gorgas was graduated from the University of the South with the degree of A. B. in 1875, and from Bellevue Hospital Medical College with the degree of M. D. in 1879. He entered the Medical Department of the United States Army on June 16, 1880, as first lieutenant, was advanced to captain in 1885, and to major in 1898.

In 1880 yellow fever was prevalent in Brownsville, Tex., in violent epidemic form. Conditions were bad beyond the power of words to portray to those who have no recollection of conditions in a yellow fever stricken city prior to 1880. The Government, as well as the people at large, had been appealed to.

Gorgas, with the rank of lieutenant, was sent to Fort Brown, near Brownsville, to assist in the medical care of the civilian population. There he first met Miss Marie Cook Doughty, who was seriously ill of yellow fever, and there he also contracted the disease. He married Miss Doughty in Cincinnati on September 15, 1885.

Later, Gorgas was in active service in Florida, in the West, in the Dakotas, and in the old Indian Territory. He accompanied the military expedition against Santiago in 1898. Fate, possibly with a purpose, visited his system with yellow fever in early life, thereby making him immune to the disease. Because of his practical knowledge of yellow fever transmission, he was appointed chief sanitary officer of Habana, which post he occupied from 1898 to 1902.

It was in 1900 that Gorgas was in close contact with the investigation into the cause of yellow fever that was being conducted in Habana by the Walter Reed board. The memorable discovery made by this board revealed the cause of the disease; but it was Gorgas who applied these principles and effected the eradication of yellow fever from Habana.

In 1904 Gorgas was appointed chief sanitary officer of the Panama Canal Zone, and in 1907 he was made a member of the Isthmian Canal Commission. In recognition of his work in Habana, his rank was increased to that of colonel by a special act of Congress in 1903, and he became assistant surgeon general of the United States Army. In 1915 Gorgas and his associates on the Isthmian Canal Commission received a vote of thanks from Congress for distinguished service rendered in connection with the contruction of the Panama Canal. This is one of the few instances in history where sanitary achievement has been recognized by the State, since Hippocrates was awarded a civic crown by the citizens of Athens for averting a pestilence from that city. This reflects much credit on our National Legislature as well as on Gorgas, for republics are usually unappreciative of the quiet conquests of science.

In 1913 General Gorgas went to Rhodesia, South Africa, at the invitation of the Chamber of Mines, Johannesburg, to advise as to the best means of preventing pneumonia and malaria among the native mine workers. He was appointed Surgeon General of the United States Army with the rank of brigadier general, on January 16, 1914, and was promoted to major general in 1915. He served with great distinction as Surgeon General during the trying period of our participation in the World War, until his retirement, at the age of 65, on October 4, 1918.

He never lost his interest in world sanitation. While he was stationed in the Canal Zone, he visited Guayaquil, Ecuador, and mapped out a plan for the control of yellow fever in that disease-ridden district. In 1916 he was made chief of the special Yellow Fever Commission of the Rockefeller Foundation, and spent several months in South America making surveys and laying plans for the eradication of yellow fever from localities in which it still prevailed.

After his retirement as Surgeon General he immediately accepted the assignment to direct the yellow-fever work which had been undertaken by the International Health Board of the Rockefeller Foundation. On May 7, 1920, he sailed for England, en route to West Africa, where he was to investigate the yellow-fever situation. He fell ill in London on May 30, 1920, and died on July 4, 1920.

Mr. BYRNS. Mr. Chairman, I yield 20 minutes to the gentleman from Arizona [Mr. DOUGLAS].

Mr. DOUGLAS of Arizona. Mr. Chairman and members of the committee, during the closing days of the last session of this Congress the House considered what was known as the Boulder Dam bill which authorized the construction of a great dam on the Colorada, an irrigation canal, and a million-horsepower plant, and among other things appropriated $125,000,000 for their construction. When the bill was considered on the floor of the House there were two distinct schools of thought with respect to it. The proponents of the measure claimed that there had never been a project contemplated by the Federal Government which had been as adequately engineered as had been the Boulder Dam project; that the plans for its construction had been thoroughly considered and well worked out; that the dam when constructed was so designed as to be perfectly safe; that as a result of the development of power the project would be constructed at no cost whatsoever to the Government; that the project was necessary to protect the American water users against our neighbor country, Mexico.

There was another school of thought which held that the project had not been adequately engineered; that the plans of construction were unsafe; that there was manifestly great danger to the life and property of the inhabitants residing on the coastal plains below the dam; that the dam itself was not predicated upon a factor of safety adequate and sufficient for such a structure of such unprecedented height and size; that therefore the dam could not be constructed within the estimate of the Reclamation Service upon which the appropriation authorized in the act was predicated; that the Federal Government could not be reimbursed for the expenditure involved in the construction of the project; and, finally, that the construction and operation of the dam would result in making available for use in Mexico an amount of water greatly in excess of the amount now available in Mexico. As a result of the attack that was made upon the bill in the House and in the Senate by the distinguished Senator from Utah, there was authorized during the closing hours of the session a special board of engineers appointed by the Secretary of the Interior, with the approval of the President, to investigate the engineering and economic feasibility of the proposed project and to report. That board was not authorized to investigate the Colorado River. It was authorized to investigate two sites, one 18 miles from the other, and both similar with respect to topographic features. It could not under the terms of the authority under which it was acting go outside of those two sites, and so its investigation was restricted to the economic and engineering feasibility of the project as authorized in the bill (H. R. 5773) which provides for the construction of a dam at Black Canyon or Boulder Canyon on the Colorado River.

The report of that board is now at hand, and it is interesting to compare the findings of that board with the arguments which were made against the bill. In the first place the board finds that the plans for the construction of the project are unsafe; that the diversion of but 100,000 second-feet of water involves an unnecessary hazard to those living in towns and valleys below the dam; that the diversion must be increased to 200,000 second-feet; that the plans for the temporary coffer dams must be modified. It finds that the factor of safety for the dam was predicated upon unconservative engineering, and that for a structure of this size the dam should be so designed as to provide for the maximum stresses which have proven to be safe in conservative engineering. It finds that as a result of the modifications which it suggests the dam can be built. I do not know that anyone in the House ever claimed that the dam could not be built. The opponents maintained that it could not be built within the then estimate of cost. With these modifications in plans and design which have been very briefly enumerated the finding of the board is that the dam can be built but at a cost of $70,600,000 as compared with the estimate, upon which the bill was predicated, of $41,500,000, or that the dam when constructed will cost at least 70 per cent in excess of the estimate and that the entire project will cost between $165,000,000 and $176,000,000 as compared with $125,000,000, which is the estimate of the Reclamation Service. The board then proceeds in its report to an investigation of the flow of the stream, because the flow of the stream has a decided bearing on the power output. It finds that 550,000 horsepower can not be produced continuously at Boulder or Black Canyon. I say Black Canyon, because the board preferred Black Canyon to Boulder, as did the engineers of the Reclamation Service. It finds that the power production at Black Canyon will at times fall to below 50 per cent of the estimated amount. It finds that, assuming an income of a million and a half dollars from the sale of stored water—and the board does not state that that income can or can not be derived; it merely quotes the figures of the Secretary of the Interior—it finds that, assuming that income from the sale of stored water, the Federal Government can not be

reimbursed for its expenditures on the construction of the project.

With reference to the million-and-a-half-dollar figure being the assumed revenue from the sale of stored water, inasmuch as every estimate of cost has been low; that is, every estimated cost by the Reclamation Service; and inasmuch as every estimate of income by the Reclamation Service has been exorbitantly high, it is reasonable to conclude that the million-and-a-half-dollar estimate of income from stored water, as cited or as estimated by the Reclamation Service, by the Secretary of the Interior, is likewise high. The board finds that if the all-American canal, which it estimates will cost thirty-eight and a half million, as against the Reclamation Service estimate of thirty and a half million, is made nonreimbursable, or if the capital investment is reduced by that amount; that if, in addition, the capital investment is reduced by the amount which is to be chargeable to the cost of flood control, and which at Boulder or Black Canyon at a minimum will be $40,000,000; and that if revenue from the sale of stored water can be derived in excess of the estimates of the Reclamation Service, or $1,500,000 annually, then, in the words of the board, "it would be possible to amortize the remaining cost with the income from power."

Mr. O'CONNELL. Mr. Chairman, will the gentleman yield?

Mr. DOUGLAS of Arizona. Yes.

Mr. O'CONNELL. Was this a board of Army engineers? What was the personnel of the board?

Mr. DOUGLAS of Arizona. It was composed of General Seibert, an Army engineer; Mr. Ridgway, water engineer, city of New York; two professors by the name of Mead, from the University of Wisconsin; and one professor of geology, from Columbia University.

The board does not state, even with all these assumptions, and even with outright appropriations made nonreimbursable in the minimum amount of seventy-eight and a half million dollars—the board does not conclude that the balance, or, roughly, $90,000,000, can be paid back to the Federal Government from the sale of water and power. The analysis, the last conclusion of the board——

Mr. MORTON D. HULL. Does it make ny recommendation on that subject?

Mr. DOUGLAS of Arizona. It does not. Its conclusion is definite and categorical that the cost can not be paid for from the sale of water and power.

Then it goes on to its final conclusion, in which it says, in effect, that if there are outright appropriations in the minimum amount of $78,500,000, made nonreimbursable; that if there can be derived a revenue in excess of one and one-half million dollars from the sale of stored water, then—these are the words of the engineers themselves—"it would be possible to amortize the remaining cost with the income from power." But the board does not state positively that the remaining cost can be amortized.

Mr. HUDSON. Mr. Chairman, will the gentleman yield?

Mr. DOUGLAS of Arizona. Yes.

Mr. HUDSON. Does not the gentleman think that the question of flood protection of the lands below should be considered and that the expense should be charged?

Mr. DOUGLAS of Arizona. I will come to that.

Mr. HUDSON. When you speak of the sale of water, do you mean the sale of a million and a half to the city of Los Angeles?

Mr. DOUGLAS of Arizona. Yes; stored water. The amount which the city of Los Angeles has estimated for a period of some years is 300 second-feet of water, the equivalent of 219,000 acre-feet of water. For the storage of that amount it will be compelled to pay in excess of $7 an acre-foot. Delivered in Los Angeles the water will cost in excess of $100 an acre-foot of water.

Mr. COLE of Iowa. Mr. Chairman, will the gentleman yield for a question?

Mr. DOUGLAS of Arizona. Certainly.

Mr. COLE of Iowa. Do you think it is expected that the money will ever be paid back to the Government?

Mr. DOUGLAS of Arizona. In reply to the question of the gentleman from Iowa, I will say that I can hold no brief for the expectations of the proponents, one way or the other.

Mr. COLE of Iowa. Has it not been customary to charge off these expenditures finally?

Mr. DOUGLAS of Arizona. Does the gentleman refer to irrigation projects?

Mr. COLE of Iowa. Yes.

Mr. DOUGLAS of Arizona. Some of the projects have been successful.

Mr. COLE of Iowa. What percentage of them have been?

Mr. DOUGLAS of Arizona. I can not say. There are so many of them. But there are two that have been eminently successful.

Mr. COLTON. Mr. Chairman, will the gentleman yield?

Mr. DOUGLAS of Arizona. Yes.

Mr. COLTON. Out of a total of over $140,000,000 there has been less than $28,000,000 charged off.

Mr. COLE of Iowa. Are not some of the other projects insolvent, and will they not have to be charged off later?

Mr. DOUGLAS of Arizona. Yes. I have not the figures here, but the deficit in water revenues as of last year was, as I recall the figures, over $5,000,000. With reference to Mexico, the board finds that the construction and operation of the Black Canyon project will make available for her use water greatly in excess of the amount now available. When it is considered that flood control and the storage of 10,000,000 acre-feet of water can be given to those who reside near the Colorado River, at a cost of not to exceed $30,000,000, as compared with all the indeterminables, financial hazards, and large appropriations, between $165,000,000 and $176,000,000, for the Black Canyon project, it hardly seems to be the course of wisdom to authorize a project involving nonreimbursable items of $78,500,000, and great hazards as to the reimbursability of the remaining $90,000,000 to $100,000,000, when every objective, except that of developing power, can be obtained through the expenditure of a maximum of $26,000,000.

In addition, this should be pointed out, that if the million and a half dollars' revenue from the sale of stored water is, in fact, obtainable if Boulder Dam or Black Canyon Dam is to be constructed, then the same amount of revenue from the sale of stored water can be derived from the construction of a storage dam at any other site, and that the million and one-half dollars, if applied to the amortization of a $26,000,000 or even a $30,000,000 ten-million acre-foot storage dam at a site other than Black Canyon, will amortize its cost completely in less than 50 years. With these facts in view, the only excuse which can be ascribed to proceeding with the Black Canyon project is that of constructing a federally owned power dam and plant.

And so, finally, as a result of the report of the special board of engineers, we find the Boulder Canyon or the Black Canyon project, as it should now properly be called, revealed in its true light, blackly outlined and silhouetted as a great, gigantic power project, three times larger than any project which has ever before been constructed. Unsafe as originally planned, unsound in its economics, of benefit to Mexico to the corresponding disadvantage of the United States, and, in short, vulnerable to every argument raised against it. [Applause.]

The CHAIRMAN. The time of the gentleman from Arizona has expired.

Mr. WOOD. Mr. Chairman and gentlemen of the committee: I will, as briefly as I can, point out some of the salient features of the Post Office and Treasury appropriations, both being combined in the measure that is now being considered and which we will commence reading, I hope, to-morrow.

The amount recommended in the bill for 1930 for both departments is $1,116,675,389. This is an increase over the appropriation made for the same purposes in 1929 of $20,245,806, and it is a reduction of $2,737,370 as compared with the recommendations made by the Budget. We have set out a detailed tabulation, which will be found at the end of the report accompanying the bill, showing each appropriation for the fiscal year 1929, the Budget estimates for the fiscal year 1930, the amounts recommended in the bill for 1930, and the increase or decrease in each item of appropriation and estimate as compared with the amount recommended in the bill.

In connection with the amounts printed in the column of 1929 appropriations, it should be borne in mind that those sums are composed of the 1929 appropriations carried in the regular annual appropriation act and in addition thereto the sums for the fiscal year appropriated in deficiency acts for purposes for which amounts are customarily carried in the regular bill.

TREASURY DEPARTMENT

The various activities of the Treasury Department are supported and conducted under two classes of appropriations—(1) the regular annual appropriations which are carried in the bills which come before Congress for consideration, and (2) the permanent annual specific and indefinite appropriations.

The following table shows the total appropriations for the Treasury Department, permanent and regular annual, for the fiscal year 1929, the estimates for the fiscal year 1930, the amounts recommended for 1930, and the increases and decreases:

	Appropriations for 1929	Budget estimates for 1930	Amounts recommended for 1930	Increase (+) or decrease (−), compared with appropriations for 1929	Increase (+) or decrease (−), compared with Budget estimates for 1930
Regular annual appropriations	$322,204,541.00	$303,423,434.00	$303,459,664.00	−$18,744,877.00	+$36,230.00
Permanent and indefinite appropriations	1,241,173,444.56	1,219,342,810.82	1,219,342,810.82	−21,830,633.74	
Total	1,563,377,985.56	1,522,766,244.82	1,522,802,474.82	−40,575,510.74	+36,230.00

The total reduction in the permanent appropriations for the Treasury Department under the amounts for such purposes for the fiscal year 1929 is estimated at $21,830,633.74. This net reduction is brought about by a number of increases and decreases in the component items of permanent appropriations but is mainly caused by the changes in two amounts, namely, the appropriation for the sinking fund for retirement of the public debt and the appropriation for payment of interest on the public debt. While there is an estimated automatic increase in the sinking fund item from $370,153,407.56 to $379,524,129.02, or the sum of $9,370,721.46, this is a favorable condition due to the addition to the sinking fund of an increment representing the amount of interest saved by retirements of principal through operation of the sinking fund. There is a very wholesome reduction in the amount of interest on the debt to be payable during the fiscal year 1930 as compared with 1929, the estimated figures indicating a reduction from $675,000,000 to $640,000,000, or by $35,000,000. This decrease is made possible by the steady and aggressive policy of debt reduction which has been taking place.

The amount directly considered by the committee in making its recommendations in connection with this bill is the aggregate of the estimates of the regular annual appropriations for the Treasury Department customarily submitted for action by Congress. That sum is $303,423,434.

The amount recommended to be appropriated in this bill for the Treasury Department for the fiscal year 1930 is $303,459,664. The amount of the appropriations for the fiscal year 1929 on a comparable basis to this figure is $322,204,541.

The amount recommended in the bill compared with the amount of the Budget estimates, and the amount of the 1929 appropriations, shows the following differences:

The bill is $36,230 in excess of the Budget estimates for the fiscal year 1930; and it is $18,744,877 less than the stated appropriations for the fiscal year 1929. In connection with this reduction under the appropriations for 1929 there should be taken into consideration several very large items of increase or decrease which may cause an erroneous impression of the decrease if they are unexplained. The bill for 1929 shows an increase for the Treasury Department due to the act of May 28, 1928, amending the classification act of approximately $5,185,000, there is included in the increase under the customs service the sum of $936,500 due to the Bacharach Act, and an increase under the Coast Guard of $666,000 in connection with the vessel replacement program.

On the decrease side, comparing 1929 with the pending bill, there is a decrease from $9,680,000 to $5,000,000 in the item for the acquisition of the "triangle" properties in the District of Columbia, the elimination of an item included only for 1929 in the sum of $8,000,000 for the acquisition of a building in New York City for the appraisers' stores of the customs service, and the sum eliminated from public buildings appropriations due to the transfer of appropriations for the initiation of new projects under the program from this bill to a later deficiency bill. The 1929 appropriations as stated in this report must necessarily be augmented at this session to care for the increases under the amended classification act and the Bacharach bill and the appropriations for 1930 for the Treasury Department will also be augmented at this session in a deficiency bill to cover new public buildings projects not yet initiated.

When these factors are taken into consideration, the bill as presented shows a normal net increase of less than $1,000,000 distributed over several of the bureaus and offices of the department and explained in more detail hereafter.

Increases over the fiscal year 1929 are shown in most of the appropriations under the Treasury Department where salaries are involved under the classification act of 1923, as amended by the act of May 28, 1928. The total of such increases in the bill under the Treasury Department involve $5,183,568. Such increases are reflected and included in the appropriations in the pending bill even though they may not show as a positive increase over the 1929 appropriations.

Increases of $500 each in the compensation of the commissioner of accounts and deposits, the commissioner of the public debt, the Treasurer of the United States, the Director of the Mint, and the Acting Supervising Architect, as estimated for the fiscal year 1930, have been eliminated. The estimates also included increases from $10,000 to $12,000 each in the compensation of the Director of the Bureau of the Budget and the Undersecretary of the Treasury and these have also been refused. These latter two increases were involved in a general proposal in the Budget involving the same increases in three other positions—namely, the Solicitor General, the Undersecretary of State, and the Comptroller General—which fall within the jurisdiction of other appropriation bills to be presented later. The denial in this bill of the two increases is the result of general committee action after consideration of all five recommendations. Under the act of May 28, 1928, amending the classification act of 1923, and the decision of the Comptroller General assistant heads of departments whose compensation was fixed under the classification act of 1923 at $7,500 are being compensated at $9,000 per annum. The five officials whose salaries are estimated in the Budget for increases of $2,000 each did not benefit under the provisions of the act of May 28, 1928.

Right here, gentlemen, I wish to say that the so-called Welch Act is a monstrosity, absolutely impracticable, and has failed entirely to carry out the purposes for which this Congress believed it to be enacted.

Mr. O'CONNELL. Will the gentleman yield?

Mr. WOOD. Yes.

Mr. O'CONNELL. As a matter of fact, did it not increase the higher-paid officers and fail to compensate, in a larger measure, those in the lower brackets?

Mr. WOOD. That is correct. When that bill was pending before this House the Members believed that its purpose was to increase the wages of the lower-paid employees, but, as it turns out, instead of it making a substantial increase in the salaries of the lower-paid employees it gives them a pittance of an increase, amounting to about 5 per cent. The salaries of the gentlemen in the higher grades, $7,500 and in that neighborhood, were increased from 20 to 25 per cent, and through the interpretation made by the Comptroller General of the United States two of the grades from which some of them were advanced under the discretion of the department heads have been entirely vacated. In some cases they went up two grades, and in consequence many who were receiving $7,500 under the operation of the Welch Act and the decision of the Comptroller General of the United States have been advanced at one jump to $9,000 a year.

Mr. O'CONNELL. In other words, the average increase of those in the lower brackets runs from $60 to $120?

Mr. WOOD. Yes; or about 5 to 10 per cent.

Mr. GARRETT of Tennessee. Will the gentleman yield?

Mr. WOOD. Yes.

Mr. GARRETT of Tennessee. My recollection is that the gentleman from Virginia [Mr. WOODRUM] in the discussion of that bill took the position that the very condition which the gentleman now describes would prevail, yet somehow or other his construction of the act was not agreed to by the House; but the things which the gentleman from Virginia pointed out at that time would take place have taken place.

Mr. WOOD. Yes; the prophecy made by the gentleman from Virginia at that time has proven true and it should impress upon the Members of the House how little we can depend upon those who are enthusiastically behind one of these measures, that is, with reference to its practical effect when it is put into force. I dare say there were not 15 men in the House who had any conception of what the practical effect of that bill would be, and we are in this dilemma now, that we have different branches of the Government making different interpretations of it.

We have the Personnel Classification Board whose business it is to study and apply as a result of their studies the alloca-

tion of the positions under the act; and then on the other hand, we have the Comptroller General of the United States, without even an application being made to him, rendering a decision by which he has given an entirely different interpretation and one which increases the pay of the persons in the higher grades approximately $2,000,000 a year. I warrant you that there are not 15 men in this House who will read that act to-day and agree with such an interpretation.

Mr. LAGUARDIA. Will the gentleman yield?

Mr. WOOD. I yield.

Mr. LAGUARDIA. Was not that bill passed under a suspension of the rules, which in itself prevented the offering of safeguarding amendments?

Mr. WOOD. Yes; that is correct, and I will tell the gentleman another thing that was done. The bill was passed, as I recall, on the 28th of May. The Bacharach bill was passed on the 29th of May, and we are now presented with a situation where the Bacharach Act, which was meant to apply to the customs service of this country covers a certain portion of the employees of that service and the Welch bill is applied to another portion of them.

Mr. O'CONNELL. Will the gentleman yield?

Mr. WOOD. Yes.

Mr. O'CONNELL. We have the right to modify or change that?

Mr. WOOD. Absolutely, and the best thing that could happen in the interest of good government and in the interest of maintaining the morale of the employees of the United States would be to repeal this act.

Mr. O'CONNELL. The morale is very badly shaken now. I have many instances of that.

Mr. WOOD. There is no doubt about that and it is perhaps more serious than any of us comprehend.

BUREAU OF CUSTOMS

The amount for the collection of customs is increased from $19,483,560 to $21,415,000, or by $1,931,440. Of this sum $1,468,912 is brought about by increases in compensation of employees under the provisions of two acts passed at the last session—the act of May 28, 1928 (Welch Act), and the act of May 29, 1928 (Bacharach Act). Subdividing this sum, $926,489 is due to the Bacharach Act covering approximately 60 per cent of the force and $542,423 is due to the Welch Act affecting 40 per cent. The remainder of the increase covers $3,360 on account of reallocations of positions in the Washington Bureau, $329,390 to provide four additional employees in Washington and 150 additional employees in the field, and $129,778 of increase very largely accounted for by cartage at New York in connection with the new appraisers' stores. The general increase in force is specifically accounted for in detail to the committee but in the main is created by the increase in customs business, the maintenance of 24-hour inspection service at a number of new international bridges and highways, and the opening of new airports of entry.

PUBLIC DEBT SERVICE

The public debt service shows an apparent increase of $20,000. The real situation, eliminating the increases in compensation, is a decrease of $126,500. The amended classification act granted increases in compensation under this service involving $146,500. Due to decreases in the public debt and the completion of refunding operations in certain of the public-debt issues there is a decrease in personnel for 1930 and a decrease in other operating expenses of $126,500, which sum comes within $20,000 of offsetting the automatic salary increases.

The appropriation for distinctive paper for United States securities is decreased from $1,175,000 to $1,000,000 due to a reduction in the number of pounds of paper to be purchased and reflected in this appropriation by the project for the reduction in the size of the paper money.

Mr. SNELL. Will the gentleman yield for a question right there?

Mr. WOOD. Yes.

Mr. SNELL. In round numbers, what is the total increase of the pay of the Customs Service for the coming year from both bills?

Mr. WOOD. The total increase from both is about $1,500,000 in round numbers.

Mr. SNELL. You appropriate that much more than was appropriated for the fiscal year 1929 for pay in the Customs Service?

Mr. WOOD. That is right.

Mr. SNELL. To what extent does that carry out the provisions of the Bacharach bill as they were understood at the time it was passed by the House?

Mr. WOOD. It is carrying out the Bacharach bill to this extent. It provides an increase that places them at the minimum rates of the Bacharach Act. It does not step them up one step as they want to be by reason of this appropriation bill, and the reason that is not done is because this is what would occur if it was done: If we make an appropriation, which would amount to some three hundred and odd thousand dollars, for the purpose of making that step, it would only apply to those who are now receiving their advance under the Bacharach Act, or 60 per cent of the customs employees. The other 40 per cent would not have the benefit of it for the reason that there has been no survey completed of the field service either under the customs service or under the field service to which the Welch Act applies. That is now being done by the Personnel Classification Board, so that if this increase of $300,000 for the benefit of the 60 per cent was allowed, it would be an unjust discrimination against the 40 per cent who could not receive it.

Mr. SNELL. Will the gentleman yield further?

Mr. WOOD. Yes.

Mr. SNELL. When we passed that bill I was specially interested in it, and I thought we had done something that was going to fix up the customs service pretty well for a reasonable length of time. I think it was the intention of the House to cover the entire customs service. I do not yet quite understand why it applies to 60 per cent, and if we went on and made the appropriations in accordance with the provisions of that bill there would be 40 per cent entirely left out who would not receive any benefits from it.

Mr. WOOD. I might at this point make a further explanation of that.

Mr. SNELL. I think that ought to be made plain to the House, because the customs employees are very much disappointed with the provisions of this bill.

Mr. WOOD. I have here a statement which I had prepared on that very proposition.

Mr. SNELL. I think it would be well if that statement was made for the RECORD.

Mr. WOOD. Under the appropriations made in the bill for the customs service there are two amounts to carry out two acts of the last session for increase in salaries. The Bacharach Act passed May 29, 1928, and the Welch Act passed May 28, 1928, both applied to the customs forces. There are about 8,500 persons in the organization. The Bacharach Act covered about 60 per cent of the force and the amount in the bill for that is $926,489.

Mr. SNELL. Will the gentleman yield right there?

Mr. WOOD. Yes.

Mr. SNELL. Why was it that the bill only applied to about 60 per cent of the whole force?

Mr. WOOD. The Bacharach Act specified just certain classes of employees in the customs service. It did not cover them all.

Mr. SNELL. The Welch Act applied to all field forces of all services?

Mr. WOOD. Yes.

Mr. SNELL. And if the Bacharach bill had applied to just the customs service, the ones in the field service of the customs service would get more pay than anybody else, is that correct?

Mr. WOOD. No. If the gentleman will allow me to proceed with this statement, I think it will explain it more clearly.

The Welch Act affected the other 40 per cent and there is in the bill on that account $542,423. These two sums aggregate $1,468,912 necessarily carried in this bill on account of the legislation at the last session. The average increase to employees under the Bacharach Act is about $4 per employee per year less than the average under Welch Act. The Bacharach Act applied to five grades of employees—namely, (1) laborers, (2) verifiers, openers, and packers, (3) clerks, (4) inspectors, and (5) guards. The act established minimum and maximum ranges of pay for the different classes of employees, with separate ranges of pay for the inspectors and the station inspectors. In placing the Bacharach Act in effect for the fiscal year 1929 it was necessary to do so before a supplemental appropriation could be provided, as the act was approved on the day that Congress adjourned. The department felt that the increases should commence on July 1, as the act provided, but that they could not under the comptroller's ruling, incur a deficiency in an amount greater than was necessary to place the employees at the minimum rates provided for the several grades. The effect of that action will be to necessitate a deficiency appropriation for 1929 of $900,000, and in the Budget for 1930 the salaries are recommended at the rates in effect for 1929.

There has been some agitation to have an additional appropriation inserted in this bill of approximately $320,000 to provide an increase of one step in the grade for each employee falling under the Bacharach Act. The subcommittee went into the matter, hearing a representative of the customs employees'

organization, the Director of Customs, and a representative of the Budget Bureau, and declined to take favorable action.

There are several reasons for a refusal to do so. The Welch Act provided for a general survey for all of the field employees of the United States outside of the Postal Service, the Foreign Service, and certain wage board groups of employees, and directed a report to be made to Congress covering schedules of employment and rates of pay for all field employees. All customs employees are included in this survey and should be treated as all other employees of the Government are treated.

Also, there is not included in the Budget for any of the other employees of the Government under the Welch Act any general increase in compensation over and above those granted during 1929 under the Welch Act. If this $320,000 should be inserted in the bill to cover 60 per cent of the customs employees they would not only receive preferential treatment over the other 40 per cent of the employees in that service who are under the Welch Act, but would also receive preferential treatment over all the other employees of the Government who are under the classification act and who are involved in this survey.

The committee felt that, under the circumstances, the customs employees under the Bacharach Act should not be singled out for special consideration. One further fact should be borne in mind in connection with any suggestion of increasing salaries at this session of Congress. The situation of the Treasury for this fiscal year shows a dangerously narrow margin of receipts above a deficit, and 1930 is not much better. With the Treasury in this condition and with employees just having received increases in this current fiscal year totaling in the neighborhood of $20,000,000, it hardly seems that salary increases of this preferential character should be indulged in at this time.

Mr. SNELL. Now, one further question. I would like to be able to explain this to the man who asks me about it. What better position will we be in next year with these two acts overlapping each other than we are at the present time?

Mr. WOOD. If the Welch bill still obtains, which I hope it will not, unless it is very materially amended, this service to which the Welch bill applies will have been amended and we can act intelligently and make it apply without discrimination of one class over another.

Mr. SNELL. To a certain extent did we not discriminate when we passed the Bacharach Act applying to the customs service?

Mr. WOOD. In a measure that is true, but as a general proposition it is not true, for the Bacharach Act applied to part of the customs service, and the Welch bill applied to that and other services, the purpose being to equalize the wage.

Mr. SNELL. The result is that while we promised the men in the customs service an increase——

Mr. WOOD. We have given it to them. We have given them a million dollars. We raised them to the minimum provided in the Bacharach Act.

Mr. SNELL. The gentleman says that they get $1,000,000 increase in 1930 over 1929. Does it apply to the entire service or only to the 60 per cent?

Mr. WOOD. The increase for the customs service under both acts cost $1,468,912. Of that, $926,000 is on account of the Bacharach Act for the 60 per cent and the rest is on account of the Welch Act for 40 per cent of them.

FEDERAL FARM LOAN BUREAU

The appropriations for the Federal Farm Loan Bureau, which are reimbursable by the farm-loan banks, are increased in the sum of $106,799. This sum is practically wholly accounted for by the reorganization which has been taking place and with which the committee has been familiar. The added sum, while an apparent increase over the appropriation for 1929, represents only a slight increase over the annual cost of the organization of the board as it at present exists, the additional cost for 1929 to be the subject of a supplemental appropriation for the remainder of this year. The board has supervision of more than 4,750 financial organizations, of which more than 75 are banks, with total resources of more than $2,100,000,000, and the proper supervision, examination, and contact with these institutions by the agency which Congress has provided for that purpose is extremely important. The progress of the reorganization work is gratifying and the committee is of the opinion that the means being placed at the board's disposal through appropriations will result in better control and administration of the system.

OFFICE OF TREASURER OF UNITED STATES

Aside from the increases due to the amended classification act, there are no changes in the office except the recommended elimination by the committee of one of the two positions of Assistant Treasurer at $6,000. This position is now vacant and the committee is of the opinion that the work of the office can be handled adequately with one Assistant Treasurer.

BUREAU OF INTERNAL REVENUE

The appropriation for the bureau under the Budget estimates was increased from $32,667,750 to $34,703,870, or by $2,036,120, all of which is due to the amended classification act, divided into $654,640 for the departmental force in Washington and $1,381,480 for the field force. The committee has recommended an appropriation of $34,500,000 which is $203,870 less than the amount recommended. While this decrease may present some problems of administration, the committee is of the opinion that with the improved condition in the work of the bureau it will be possible during the next fiscal year to effect further administrative decreases. The reductions which have taken place in bureau expenses and organization through the past two or three years have been considerable and evidence a desire to cooperate with Congress in bringing the organization to as compact a basis as the disposal of the audit would permit. For the period covered by the fiscal years 1926, 1927, and 1928, the force has been reduced 2,663 employees with annual salaries totaling $3,473,389, making a total reduction in the bureau's appropriations since the close of the fiscal year 1926 of $4,354,110.

The amount recommended for refund of internal-revenue taxes illegally or erroneously collected is recommended at the same amount for the current year, $130,000,000. The committee is advised, however, that the sum both for the current and ensuing fiscal years will be insufficient due to court decisions and other factors involving refunds which are impossible to foresee or estimate. Any deficiencies therefore for either year will have to be provided later at dates when more accurate estimates of the probable needs can be made, but early enough, however, to prevent involving the Government in the payment of extra interest on account of delayed payments.

The committee in the past has kept the House advised as to the relationship of the collection of back taxes to the payment of refunds of taxes where overcollections have been made. The situation down to date shows that since 1917 we have collected in back taxes $4,061,000,000 and have refunded approximately $975,000,000.

BUREAU OF PROHIBITION

The appropriation for the Bureau of Prohibition is increased from $12,729,140 to $13,500,000, or by the sum of $770,860. The additional amount required by the bureau for increases in compensation to cover the cost of administering the amended classification act is $777,164 so that the increase granted practically covers the cost of the added burden on the bureau. The Budget recommendation was for $13,400,000, which would have involved a reduction in the appropriation, aside from the salary increases, of approximately $106,000. The committee did not concur in this suggested decrease and has restored the sum of $100,000, leaving the appropriations for 1930 to stand at the 1929 figure plus the additional amount necessary on account of the classification act. In connection with narcotic enforcement the suggested proviso to permit the use as a revolving fund of the moneys expended for purchases of drugs in order to make seizures is approved and such funds during the next fiscal year, when recovered in connection with arrests, will be redeposited to the appropriation and again used for purchase purposes instead of being covered into the Treasury as miscellaneous receipts.

COAST GUARD

The appropriations for the Coast Guard are increased from $28,902,570 to $29,670,171, or by $767,601. The net increase is made up almost entirely by the additional funds on account of the vessel-building program authorized in 1926. With the funds provided in this bill, appropriations will have been provided for the completion of eight new cutters and funds granted for commencing work on the ninth. As the authorizing act provided for 10 new boats, there will remain one additional cutter to be taken up at a later date. The additional amount provided in this bill on account of the building program is $666,000. A number of increases are provided in the operating expenses of the service. The item for pay and allowances is increased $16,600 over the current year, but that is not indicative of the changes in organization operating under the entire appropriation of $19,000,000. The sum provides for 336 commissioned officers, 65 temporary officers, 105 cadets, 63 chief warrant officers, 863 warrant officers, 10,845 enlisted men, and 836 on the retired list. Compared with the personnel appropriated for the current year, the organization shows an increase of 24 commissioned officers, 11 warrant officers, 57 enlisted men, and 18 on the retired list, and a decrease of 50 temporary officers and 4 chief warrant officers. Two new vessels are to be placed in commission and one old cutter and one destroyer decommis-

sioned. One new Coast Guard station also goes into commission. The changes in personnel involved in the commissioning of the new vessels and the new station account for the increased enlisted personnel. The changes in commissioned personnel are due to the inability to secure temporary commissioned officers, and while there is an increase of 24 in the number of regular commissioned officers, the number provided is still below the total number allowed by law.

In connection with the item for pay and allowances, provision is also made for the use of not to exceed $6,000 for the payment to crews for excellence in gunnery, target practice, and engineering competitions.

Other increases in operating expenses provide additional funds for vessel repairs and outfitting of boats and stations and additional funds for renewal of cable ends on the New England and New Jersey coasts.

BUREAU OF ENGRAVING AND PRINTING

The total appropriation for the bureau is increased from $6,207,795 to $6,376,260, or $168,465. There is, however, included in the 1930 figure the sum of $370,728 for carrying out the increases under the amended classification act. Eliminating this figure from consideration, the appropriations for the bureau show a net decrease of $202,263, which is due to the new note program. The committee has been advised that the new currency will be placed in circulation in July, 1929. Combining the decrease under the Bureau of Engraving with the decrease under the item for distinctive paper of $175,000, this bill will show a reduction for 1930 on account of the new notes of $377,263. The estimated annual saving, including all operations for all branches of the Government connected with the paper-currency program, is approximately $2,000,000, leaving out of consideration the added burden recently placed on the cost by the enactment of the amended classification act.

PUBLIC HEALTH SERVICE

With the exception of increases in compensation granted under the amended classification act and automatic increases for commissioned personnel under existing law, the appropriations for the Public Health Service present very few increases, and such as are recommended are of a minor character with one or two exceptions. For the current fiscal year an appropriation of $347,000 was made for rural sanitation work to carry on cooperative health organization and rehabilitation work in 87 counties in the area of the South affected by the Mississippi River flood in conjunction with the States and the Rockefeller Foundation. The committee was advised that while there was some dimunition in the Federal assistance required to carry on the work, the amount of the Budget estimate of $85,000 would be insufficient to do the Government's share and insure the success of the task that had been undertaken. The committee has therefore increased the amount of the Budget estimate by $130,500, bringing the total to $215,500, but is not able to assure the House at this time as to whether that sum will complete the work in those counties. Many of them were severely impaired financially by the flood and unless the Federal and other cooperative assistance is provided until they are able to take over their own health organization, a large part of the work thus far done may be lost.

In connection with marine relief the committee has recommended an increase of $26,600 over the Budget allotment in order to provide relief stations at Port Newark, N. J., and Gary and Indiana Harbor, Ind., all points at present without such stations and where it is believed by the Public Health Service that the increase in the amount of shipping business justifies the installation of facilities to furnish the aid to seamen which the law provides.

BUREAU OF THE MINT

Under the Budget estimates there was recommended the elimination of the mint at Carson City, Nev., now functioning only as an assay office. The committee concurs in this recommendation and has also eliminated from the bill provision for the assay office at Salt Lake City, Utah. The committee is of the opinion, heretofore presented to the House, that in view of the small amount of business done at these offices and the proximity of other Federal offices where the work may be performed without any undue hardship that both should be abolished. The total amount is not large, involving approximately $6,500 for Carson City and $4,500 for Salt Lake City.

A consolidation is recommended of all appropriations for the operation of mints and assay offices into one fund, which will provide easier administration. Eliminating the added amount on account of increases on account of the classification act, there is a decrease of $10,940 on account of the two offices and $16,240 resulting from a consolidation of the appropriations.

PUBLIC BUILDINGS

The total appropriations under the jurisdiction of the Supervising Architect's Office shows an apparent decrease from $70,456,823 to $45,737,870, or in the sum of $24,718,953. A number of large increases and decreases enter into this net amount. The largest single item of appropriation is that for continuation of the building program, for which the sum of $23,040,000 is included. This shows an apparent decrease of $21,529,000 under corresponding appropriations for 1929. There was included in the 1929 appropriations an appropriation of $8,000,000 for the purchase of a building in New York for the appraisers' stores. There is not included in this bill any provision for new building projects not heretofore initiated under the existing program. Eliminating these two items from consideration the amount for 1930 is practically the same as for 1929. It is anticipated that sums for new projects aggregating approximately $12,000,000 in initial appropriations will be submitted later at this session for action after the Treasury and Post Office Departments have completed the data upon which to base their recommendations for new projects. With the sum included in this bill and the amount to be presented later the total amount for carrying on building construction to be presented for consideration at this session will approximate $35,000,000 and this sum will be practically the same as the amount appropriated at the last session for similar purposes.

Aside from increases included on account of the amended classification act, the other changes under the architect's office include additional sums for minor remodeling of existing buildings to gain additional emergent space, additional rentals of temporary quarters pending the construction or remodeling of buildings under the construction program, additional funds for repairs to buildings, and additional personnel to maintain and operate new buildings estimated to come into commission during the next fiscal year. A decrease in operating supplies for public buildings is effected due to decreases in the price of coal.

In appropriating the sum of $23,040,000 for new construction the committee has concurred in the recommendations of the Treasury Department and the Budget in the method to be pursued as to the buildings already authorized and which have an initial appropriation available. There is included in the bill a lump sum of $23,040,000, which is applicable to all of the 137 enumerated projects upon which limits of cost have heretofore been fixed and which may be in need of funds to carry them forward until the next appropriations become available in the 1931 bill. This is a departure from the practice of the past of specifically appropriating for each building until the final completion has been secured. The Acting Supervising Architect has made it clear to the committee, so that they may in turn assure the House, that under this method of appropriation the building program will be carried forward with a minimum of delay and the funds included under the lump sum of $23,040,000 will be sufficient to carry on the work on all of the projects stated that will be ready to go ahead. Delays are frequently encountered in the acquisition of sites, the letting of contracts, and in ascertaining foundation conditions that will not permit some projects to advance as rapidly as others, but in the execution of the work involving the whole list of buildings ample funds will be available to make progress at just as rapid a rate on all of the enumerated buildings as would be possible if a specific appropriation were made for each project. The new method will permit of more flexibility of public building funds, prevent the piling up of specific appropriations faster than they can be used, and result in better administration of the building program.

All of the projects included in the bill are under the limits of cost now fixed by law, except three cases which were presented at this session for changes. The Budget recommendation for an increase in the limit of cost at Lubbock, Tex., from $160,000 to $335,000 is changed to $220,000, and a provision is made so that the building will be constructed in such a manner that facilities for Federal courts may be added at a later date. The committee was not impressed with the necessity for providing facilities for the courts at this time based upon the available information as to the amount of court business.

The limit of cost of the building at South St. Paul, Minn., is increased from $120,000 to $140,000 on account of the inability to secure an adequate site at existing figures. For the new building at Portland, Oreg., the cost was recommended to be increased from $1,500,000 to $1,950,000 to cover $350,000 for additional land and $100,000 for additional space and building features. The committee in this case has added the $100,000 to bring the limit up to $1,600,000 and has not included the additional amount for land.

Under the public buildings act annual expenditures were limited to an amount not exceeding $35,000,000 per annum, with

the exception that commencing with the fiscal year 1928 any unexpended increment under this limit might be carried forward to succeeding fiscal years and be added to the $35,000,000. The accrual of this character coming over from the fiscal year 1928 was $28,854,000, the expenditures in 1928 being $6,146,000. The expenditures in the fiscal year 1929 are estimated at approximately $33,000,000, leaving an accrual of $2,000,000. These two increments, $28,854,000 and $2,000,000, total $30,854,000 to carry forward. The estimated expenditures in the fiscal year 1930 will approximate $50,000,000, or $15,000,000 in excess of the $35,000,000 rate and thereby absorbing $15,000,000 of the $30,854,000 of accruals, leaving $15,000,000 to be absorbed in 1931, when the expenditures can again run to $50,000,000. This leaves the public-buildings program running ahead at a satisfactory rate considering the magnitude of the program involving $265,000,000 of construction and also giving due consideration to the condition of the Treasury and the amount of revenue that can be devoted to that program when considered in connection with the other building programs being carried on by the Government.

For the acquisition of properties in the triangle area in the District of Columbia the sum of $5,000,000 is recommended as against $9,680,000 for this current year. With this sum the total appropriated for securing this property will be $14,680,000. The committee believes that with the progress being made in purchases and the results of condemnations that it will be possible to secure all of the proposed property at considerably less than the total authorized amount of $25,000,000.

POST OFFICE DEPARTMENT

The estimates for the Post Office Department aggregate $815,989,325 for the fiscal year 1930.

The total amount appropriated for the department for the fiscal year 1929 aggregates $774,225,042.

The amount recommended in the accompanying bill is $813,215,725. This sum compared with the 1929 appropriations and the 1930 estimates is as follows:

It is $38,990,683 more than the appropriations for 1929 and it is $2,773,600 less than the Budget estimates.

The total increase for 1930 over 1929 as indicated by this bill involves, in addition to the necessary increases on account of the normal growth of the service, and the automatic promotions of employees as provided by law, a number of unusual increases due to new legislation, to the Interstate Commerce Commission decision, and the unusual expansion and development of the carrying of mail by air.

The largest items of increase composing the difference of $38,990,000 between 1929 and 1930 include the following items: $15,000,000 on account of the decision of the Interstate Commerce Commission affecting the appropriation for transportation of mail by railroads, $6,360,000 due to the act of the last session granting a night-work differential to employees in the service, $2,790,000 on account of the act of the last session granting allowances to fourth-class postmasters for rent, light, fuel, and equipment, $1,075,000 on account of the legislation of 1928 increasing fees to special-delivery messengers, $3,950,000 on account of transportation of foreign mail by steamboat and airplane, and $6,870,000 on account of transportation of domestic mail under air contracts.

On August 1, 1928, the Interstate Commerce Commission rendered a decision increasing the rates for carrying the mails upon a petition filed by the railroads several years ago. The effect of the decision, in so far as it affects the appropriation bills, is to cause a deficiency for the fiscal year 1929 (11 months) of $13,750,000, and for the full fiscal year of 1930 to require $15,000,000 additional. The decision of the commission was retroactive to the date of the filing of the petition involving some $45,000,000 additional. This latter amount is still in controversy, as the matter is now before the Supreme Court of the United States on appeal as to the retroactive feature, the Court of Claims having sustained the decision of the commission.

Included in the appropriation of $23,000,000 for carrying the foreign mail are two outstanding items involving and accounting for the increase of $3,890,000 and both of which are direct results of legislation of the last session. Under authority of the merchant marine act of 1928, the Postmaster General has entered into 20 special contracts for the carrying of mail based upon the policy of that act for the Government to aid in the development of an adequate American merchant marine. Bids have been received on three additional contracts of this character and routes have been advertised but bids not yet received on two more.

Under the contracts already let and those in prospect the total cost of the special contracts of this character under this appropriation will be approximately $12,000,000. As a part of the requirement of the law and the contracts, this action of the Post Office Department will mean the building of 24 ships under the American flag under the contracts already let and the building of 6 more under the contracts pending, making a total of 30 new American ships as a result of this feature of the merchant marine act of 1928. The difference in the cost of carrying the mail under the special contracts in the interest of the development of the merchant marine as compared with the cost of carrying the same mail on the weight basis is approximately $8,000,000 excess due to the merchant-marine policy of the Government and a factor somewhat apart from the ordinary operating expenses of the Post Office Department.

There is also included in the foreign-mail item the sum of $4,000,000 for the carrying of foreign mail by contract under legislation of the last session. The bill makes provision for the expenditures of not to exceed this sum during the fiscal year 1930 under contracts which will not involve expenditures during the fiscal year 1931 in excess of $4,800,000. It is anticipated that the contracts for carrying the mail to foreign lands by aircraft will not all be entered into in time to be in full operation for the fiscal year 1930 and that the figure of $4,000,000 will cover that year, but that the contracts to be made during the remainder of 1929, and in effect during 1930, and the contracts entered into during 1930, will involve aggregate contract payments in 1931 of approximately $4,800,000. The contracts which have been let and routes in operation cover air mail service as follows: Daily service from Miami to Habana, Cuba; service six times a week from New York to Montreal, Canada. The contracts which have been let but under which service is not yet in operation are as follows: From Key West to the Canal Zone, daily service; from the Canal Zone to Paramaribo, Dutch Guiana, triweekly service; from Key West to San Juan, P. R., triweekly service; from San Juan to Trinidad, triweekly service; and from Miami to Nassau, triweekly service. There is also in contemplation a route from Colon, Canal Zone, to Concepcion, on the west coast of South America, biweekly service. The importance of many of these lines in relation to the maintenance and development of our foreign trade is readily understood. The cost of maintaining the service and furnishing the facilities in contrast to the revenue to be received during the fiscal year 1930 will be about $1,000,000 of revenue to $4,000,000 of expenditure. As with the special contracts for carrying the mail by ocean vessels, the Postal Service is carrying an added burden on the normal service expense by aiding in the aeronautical and commercial development policy of the Government.

The appropriations for carrying domestic mail by air show an apparent increase over 1929 of $6,870,000. There will necessarily have to be an additional appropriation for the fiscal year 1929 in order to carry the additional routes established and the larger amount of mail being carried by air which will bring the total for this year up to approximately $10,000,000, making the real increase of 1930 over 1929 approximately $3,300,000. The most recent data furnished the committee shows that there are 27 air-mail routes under contract with a total length of 11,977 miles and over which a total mileage is flown daily of 25,385. The effect of the reduction in the postage rate on air mail on August 1, 1928, from 10 cents for each half ounce to 5 cents for the first ounce and 10 cents for each additional ounce brought about an immediate increase in the poundage carried, the total number of pounds of air mail jumping from 214,558 for the month of July, 1928, to 419,047 for August, 423,838 for September, and 467,422 for October. The amounts paid to contractors for carrying this mail varies per pound under the different contract rates, the totals by months running as follows: July, $445,220.43; August, $820,658; and September, $843,532. The payments to contractors for October aggregated $915,837. At the October rate of payment the cost basis of domestic air mail was in excess of the annual rate of $11,000,000. If there is a continuation of the rate of increase in the poundage carried, the amount recommended in the bill, $13,300,000, appears to be a reasonable estimate of the cost for the fiscal year 1930.

Under the act of May 17, 1928, which reduced the postage rates on air mail, provision was made for a periodic adjustment of the rates to be paid under the contracts for carrying the air mail. As the rates paid are on a per pound basis and the effect of the lowering in the rates has been a doubling of the poundage carried, there should be some adjustment in the contracts. The Post Office Department as yet has not made any changes in contract rates but is studying the matter with that end in view. The committee believes that this phase of the air-mail situation should be carefully watched and checked as contemplated by the law to the end that expenditures for carrying the mail by air and the revenues from that source should come more nearly matching each other and begin to

show a profit. With the present increase in poundage and the old contract rates still in force, there is no doubt that domestic air-mail operations are running at a deficit. The representatives of the department before the committee were unable to give any figures as to the relationship of revenues and expenditures due to the unusually rapid developments in the service brought about by the increased volume of mail handled through the reduction in rates and the expansion of the service.

The department has brought about one considerable decrease in the appropriations for the fiscal year 1930 by a decrease in the amount for stamped envelopes, stamps, etc., the amount declining from $7,950,000 to $6,050,000, or $1,900,000. This is accomplished by the reletting of the contract for stamped envelopes, a 4-year contract effective January 1, at prices considerably lower than those prevailing under the previous contract and accounting wholly for this decreased amount.

The total amount for the department proper in Washington is increased from $3,939,892 to $4,156,325, or $216,433. The provisions of the amended classification act applied only to the department proper and to the mail-equipment shops. The amount on account of that act for the department proper is $198,363 and for the equipment shops the total is $60,000, bringing the total amount for the department to $248,363. Additional personnel is provided under the office of the second assistant of $10,070 under the salary appropriation and $15,000 under the air mail appropriation to care for the increased duties placed upon that office under the merchant marine act and by reason of the expansion of the air mail service both domestic and foreign.

The revenues of the Post Office Department for the fiscal year 1928 amounted to $693,633,921.45 and the expenditures to $726,997,070.41. Allowing for adjustments between the unliquidated obligations for the fiscal year 1928 and for expenditures during 1928 on obligations coming down from prior fiscal years, the revenues were $32,080,202.46 less than the expenditures.

The estimated revenues for the fiscal year 1929 are $707,000,000 and the estimated expenditures are $790,495,830, and the estimated deficit in revenues is $83,495,830. This situation is directly due to legislation enacted at the last session. It will be noted that the increase in the deficit between 1928 and 1929 is approximately $51,000,000. The committee has had prepared by the Post Office Department a reconciling statement showing these differences due to the act decreasing postal rates, the acts providing for a night differential in pay of employees and allowances to fourth-class postmasters and increasing the rates for special-delivery fees, the merchant marine act of 1928, the Interstate Commerce Commission decision, the act for the foreign aircraft service, and the amended classification act:

Increases in expenditure:		
For railroad transportation (½ of $15,000,000, from Aug. 1, 1928, to June 30, 1929)		[1] $13,750,000
For night-work differential paid to employees at post offices—		
Clerks at first and second class post offices	$3,300,000	
City delivery carriers	335,000	
Watchmen, messengers, and laborers	200,000	
Vehicle service	275,000	
Railway Mail Service, salaries	2,250,000	
		6,360,000
Foreign-mail transportation—		
For merchant marine	7,500,000	
For foreign aircraft service	1,900,000	
		9,400,000
Allowances to fourth-class postmasters for rent, light, fuel, and equipment		[1] 2,790,000
For fees to special-delivery messengers		[1] 1,075,000
Salary increases under the Welch bill		[1] 258,363
Total additional payments		33,633,363
Estimated loss in revenues due to decreased postage rates under postal rate bill		16,285,000
		49,918,363

While the major part of these increases relates to the normal operating costs of the department, there are a few of them, as heretofore pointed out, that are more due to a matter of general governmental policy in the encouragement of the merchant marine and aeronautical development than to the Postal Service proper. The act reducing postage on domestic air mail will contribute to the deficit, but at this time the committee has not sufficient data on which to give an estimate of that feature.

The factors entering into the deficit for the fiscal year 1929 are all projected into the fiscal year 1930, and the estimated situation for that fiscal year shows expenditures at $806,209,325 and estimated revenues at $735,000,000, or an estimated deficit of $71,209,325.

[1] Includes supplemental appropriation requested.

Mr. Chairman, those are the principal items presented by this bill, and under the five-minute rule we will have ample opportunity to elaborate upon them. [Applause.]

Mr. BYRNS. Mr. Chairman, I yield now to the gentleman from Louisiana [Mr. O'CONNOR] such time as he may desire.

Mr. O'CONNOR of Louisiana. Mr. Chairman and gentlemen of the committee, I was just telling our distinguished friend from Tennessee [Mr. BYRNS], who is looked upon with an affectionate eye by every Member of this House, a story which aroused his risibilities, and I am going to repeat it at this point in my remarks, because I feel its application will be seen without need of further explanation. A celebrated statesman who has "gone west" forever once said that some men could talk for half a minute and keep the world thinking for half a century, while most of his countrymen could talk for half a century and not keep the world thinking for half a minute. [Laughter.]

Gentlemen, I am about to ask unanimous consent to put in the RECORD as a part of my remarks an address that was recently delivered by a great American, one who has played an important part in the life of this generation. To my mind that address challenges the best thought and attention of the advocates and champions and well-wishers of our mechanicalized industrial civilization and ought to keep the world thinking for a century. The address was delivered by Mr. Green, president of the American Federation of Labor, and, for sheer intellectuality and grasp of the industrial situation and what the future holds in store for this country, many of us deem it a masterpiece of analysis and oratory. It was delivered on November 19, 1928, in New Orleans, on the opening day of the annual convention of the great labor association. I desire to make that speech a part of the RECORD and shall feel proud if you will grant me the privilege of inserting it as a part of these remarks, because I think it should be read by every American with the keenest interest. I also desire to place in the RECORD, not side by side with it, because it might excite a feeling that I was not modest but egotistical, but in another part of the RECORD, some remarks of my own in connection with the entertainment of the American Federation of Labor delegates by the Federal employees of the port of New Orleans on the night of the 22d of November, 1928, in New Orleans. I do not believe that my remarks will cause my countrymen to think for half a second, but their publication in the RECORD will be somewhat flattering to myself, and I am quite sure that in accordance with the law of compensation, which operates unceasingly in every phase of human existence, the address of Mr. Green will excite for many years to come the attention of all of the well-wishers of this mechanicalized industrial civilization which we enjoy to-day, and which we all hope will continue a boon and not become a curse to mankind.

Mr. Chairman, I ask unanimous consent to insert as a part of my remarks the address of Mr. Green to which I have referred.

The CHAIRMAN. Is there objection?

There was no objection.

The address of Mr. Green is as follows:

President GREEN. Chairman Boelling, representatives of the city government, the State government, the Louisiana State Federation of Labor, New Orleans Central Body, Congressman O'Connor, and representatives of the church, the officers and delegates in attendance at this convention, I am sure, have listened with feelings of deep satisfaction to the cordial welcome extended them, to the sympathetic expressions of deep and abiding interest in our common welfare and in the great work we are trying to do.

We are, indeed, grateful to all these speakers who, in a representative capacity, have come here this morning and extended to the officers and delegates in attendance at this convention a most warm and cordial welcome. And this welcome has refreshed our memory, for we recalled, as we listened to these words, that 26 years ago a convention of the American Federation of Labor assembled in this historic city. Our hearts are made sad as we reflect over the period intervening between 1902 and 1928. There are some in attendance at this convention who were delegates to the convention held in this city 26 years ago, but we are sad to recall that there were many who were present then who are not with us now. I refer specifically and especially to our great leader, my distinguished predecessor, the one who occupies a larger place in the hearts of labor than any other man who ever lived upon the American Continent.

I recall, as you recall, that 26 years ago he battled and fought for labor in this city, and we are sad as we recall that he is with us no more. There are others to whom I could refer; their names come instinctively to your mind; and on this occasion we are saddened to

that extent when we recall that during this 26-year period the grim reaper has made great inroads in our ranks. But, my friends, we inherited from them an inspiration, a courage, a determination to go forward, and I know I can say that from the bottom of our hearts we are determined to make this convention as epoch making and as historic as our predecessors did 26 years ago.

I am reminded of this fact also: That the citizens, the splendid men and women of New Orleans, and those who live along this great Mississippi Valley, are deeply interested in flood protection. To them this is a matter of supreme interest. The terrible flood of a short time ago wrecked homes and farms and communities, brought home to the people of this rich country the necessity of protecting homes and farms and communities against the ravages of the great Mississippi River. And so they came to the Congress of the United States and appealed for flood-relief legislation. I am happy to announce on this occasion that the American Federation of Labor mobilized its great moral and political support in behalf of this legislation. And our representatives, along with the representatives of this locality, appeared before the Members of Congress and urged upon them the enactment of legislation for the purpose of protecting this Mississippi Valley and those who live here. We favored legislation which provided for the construction of this great work, for the carrying out of this enterprise by the Federal Govevrnment and with funds supplied by the Federal Government. That was the attitude of the American Federation of Labor upon this proposition.

And so we are happy to say that Congress responded, and we anticipate that within a short time, with the proper funds, properly and legally appropriated, the great work of flood protection and flood control will go on in the Mississippi Valley, and when it is undertaken the men of labor will be called upon to do the work. Men of training, men of skill, men of genius, men who will use the spade and the shovel—these are the men who will be called upon to do this work. And so labor is looking forward to the time when this work will begin and when it will be carried forward to a successful conclusion. Organized labor is interested in this great project; we expect to participate in it, and to play a very large part in carrying forward the enterprise.

I think it is appropriate to refer to this fact this morning, because I know the people who live in the city of New Orleans are more interested just now in the development of this great flood-control project than in any other piece of legislation considered, or that may be considered, by the Congress of the United States.

We are glad to be here in 1928 to enjoy the hospitality of the people of this part of the Southland; to work in this happy environment; to visit in this great historic city located where the greatest river in the world ends its weary course from Lake Itasca to the sea. We are glad to be here and to form the acquaintance of the wonderful people of the Southland. We know something about the traditions of this great section of America, its history, its people, and I want to say to the working people here in New Orleans and in the State of Louisiana that the American Federation of Labor is deeply interested in their economic, social, and industrial welfare. Yes, we are here just as much interested in the working men and women of the Southland as we are in the working men and women in the most congested industrial circle of our country.

May I just say this at this point: That our great congress of labor is moved by the same influences that were always apparent in every convention of the American Federation of Labor. If I were called upon to sum up the philosophy of the American Federation of Labor in the shortest and simplest sentence I would say that our great philosophy and our great objective throughout America and throughout the world is human betterment. We are conscious of the fact that we are called upon now to deal with these mighty problems that have grown out of and developed out of our modern industrial life. In addition to the fundamental principles upon which our organization rests we are called upon to meet and grapple with problems peculiar to our own day and our own age.

We have always emphasized, above and beyond all other things, wages, hours, conditions of employment, the protection of men and women in industry; but now in addition to these great, outstanding objectives and principles of the American Federation of Labor we are called upon to deal with mass production, machine displacement, the modern day injunction, and the competition that comes from convict labor. All of these things are the development of our own time, our own day, and our own age.

And so labor is dealing with these problems, and in dealing with them we are offering a solution for every one of them. We realize that there is no question more serious than this one of machine displacement, the development of mechanical devices and power to the point where the machine operated by the few is so serving as to displace hundreds of working men and women. So we stand as a challenge to this thing, demanding that human beings shall first be protected above and beyond any material thing or any mechanical device, for the American Federation of Labor will not permit a human scrap heap to be created in America.

And we are battling for more leisure, greater surcease from toil, an opportunity for men and women to recuperate so that they can give service, and it is for that reason we are demanding a lessening of the work day and of the work week in accordance with industrial development. We demand that these reforms shall be instituted as industry is made ready and as the workers require greater leisure and more recreation.

Then, my friends, this question of injunctions, the thing that comes nearer and closer to the hearts of working men and women than perhaps any present-day modern problem. We are reminded of the fact as we sit in this convention that the decisions in the Bedford Cut Stone case and in the Hitchman case, and in some of these other cases to which I could refer, are still recognized as the rule of the equity courts, enforceable whenever circumstances and conditions arise that would warrant the courts to exercise their equity powers. We can not sit idly by, we can not function properly, we can not stand still and accept such judicial procedure, because to do so would mean the recognition of a power, a wrongful power, existing in America, that would crush the very life out of organized labor.

It is my judgment, and I think it is the judgment of other thinking men connected with our labor movement, that the principles set up in the Bedford Cut Stone case and in the Hitchman case are so vicious as to call for the condemnation, the bitter condemnation, of every liberty-loving American citizen. These judicial decisions deprive working men and women of the right to give service or withhold service at will; they interfere with the inherent right possessed by men and women as long as America has been known as a free land, and of course working men and women can not under any circumstances yield or submit to such dictation or such power. The right to give labor, to give service, and to withhold service is the one right that labor possesses, and that right must never be destroyed or lessened either by legislation or by judicial decree.

So we have set ourselves steadfastly to the task of securing remedial legislation, and I want to promise you and all who are associated with us that at the next session of Congress the full force and power of American labor will be utilized in trying to influence Congress to give us relief from these judicial decrees.

There is one other matter, in conclusion, to which I wish to call your attention. A short time ago there assembled in the city of New York a convention called the National Manufacturers' Association convention. It was a convention composed and made up of manufacturers, and at that convention a committee reported—and, so far as I know, the report of the committee was that the American Federation of Labor was a menace to American institutions. It was rather significant that following the action of this National Manufacturers' Association convention a great meeting of communists was held in Madison Square Garden, New York City. The newspapers reported that 12,000 communists assembled at this great jollification and glorification meeting of the communist organization and the Communist Party.

At that great mass meeting in Madison Square Garden the Communists decided to hang the officers of the American Federation of Labor in effigy. They did not hang capitalists or members of the Manufacturers' Association, but members of organized labor. They considered the representatives of the American Federation of Labor as the greatest enemy of communism in America, and so in celebration of the end of their political campaign they hung representatives of organized labor in effigy. The manufacturers in one hall declaring us a menace to American institutions and the communists in another hanging us in effigy!

Now, my friends, we hurl that great falsehood issued by the Manufacturers' Association back into their teeth; we challenge them to offer one bit of evidence in support of their declaration that the American Federation of Labor is a menace to American institutions. I ask them in all fairness was the American Federation of Labor a menace to American institutions when the great Samuel Gompers during the World War raised his voice in behalf of American institutions? Was it a menace when labor responded in defense of liberty, justice, and democracy? While we were fighting to preserve American institutions some of these men were, no doubt, profiteering during the war.

So, my friends, it is rather significant that we have the two extremes attacking and opposing organized labor—the Manufacturers' Association in one hall in New York City and the communists in Madison Square Garden on the other end. I think we must be pretty decent, respectable citizens when we are able to invite the opposition and the antagonism of these two extremes.

We are battling for a higher standard of life and living for working men and women; we are fighting for the protection of children. We are the one force in America that has done battle for the adoption of the constitutional amendment that has for its purpose the protection of children against exploitation in industry. We are fighting for the protection of free labor in America against competition from convict labor.

We are fighting for the right of workingmen's children to enjoy all the opportunities that America offers to the children of any group or

any class. We are fighting that men and women might so appropriate to themselves the opportunities which our free institutions afford; that they may occupy that place in life to which their ability and qualifications fit them.

We have here in this convention representatives from all groups of working men and women. They come here imbued with a noble purpose. They ask only that they might raise the standard of life and living of the masses of the people. They are determined that they shall enjoy a fuller and freer life. We place human values above material values; we place men and women above a lot of other things, and as a result we have the representatives of the artisans and artists, the representatives of the skilled trades, the miscellaneous trades and the unskilled trades all sitting in this convention.

Speaking for myself, I am happy to lead such an army; I am happy to stand in this position of responsibility and typify the splendid working men and women of our country. All of you, as you know, came up from the ranks, from the mechanics' bench or from the machine shop; all of you served your apprenticeship in the workshops, the mills, the mine, or the factory. You represent the nobility of labor, and I am happy to stand this morning as your representative and challenge the evil forces of greed in America at this time in behalf of the working men and women of America.

Mr. Chairman and gentlemen, I wish to again repeat our thanks for your very warm and cordial greetings. We shall keep in mind the promises you have made us; we shall, I assure you, enjoy your hospitality to the limit, and we want to assure you that while we are here in New Orleans if we can assist you or help you in any way in promoting the best interests of the working men and women of this city we will gladly do so.

It affords me great pleasure to convene this Forty-eighth Convention of the American Federation of Labor and to declare it open for the transaction of business.

Mr. O'CONNOR of Louisiana. Mr. Chairman, also I ask unanimous consent to insert or print an address that I myself delivered, as already stated.

The CHAIRMAN. Is there objection?

There was no objection.

Mr. O'CONNOR of Louisiana. Mr. Chairman, under leave to extend my remarks I insert the following address delivered by me on November 22, 1928, at the banquet tendered by the Federal employees to the visiting delegates to the American Federation of Labor convention in New Orleans, La.:

Mr. Toastmaster, ladies and gentlemen, I am glad to be present and privileged to speak a few words at this banquet, and I will be brief, for I know that many earnest speakers will follow me, and, like most of you who are honoring me with your attention, I wish to sit at the feet of the Gamaliels that will address you and listen to their words of wisdom and drink from the fount of their knowledge of the great problem that will be discussed, considered, and resolved by the delegates to the convention now being held in this city. Since brevity be the soul of wisdom, is a good Shakesperian suggestion to follow, but we should not be so brief as to be obscure—this is on behalf of the outstanding speakers who will address you. In so far as I am concerned you may be sure I will not be lengthy or verbose. I have always been mindful that a celebrated statesman, who has gone beyond the sunset and the path of all the western stars forever, said that some men could talk for half a minute and keep the world guessing for half a century, while others could talk for a century and not keep the world guessing for half a second. I do not lay the flattering unction to my soul that I will ever belong to the former, and I have always prayed the good Lord to deliver me from falling into the latter class. Nor should any of us ever forget that it is related in Acts, in that most remarkable book, the Bible, that St. Paul spoke so long at Troas that a fellow fell out of the third loft and was carried out for dead.

The first man on this earth was a laboring man and the last man on earth will be a laboring man or working man. And while there have been in all generations and ages dreamers and planners to whom we give due credit as the real music makers of the world, it is entirely clear and perfectly obvious that our civilization was constructed, built, reared, erected by men and women who worked, toiled, and moiled with their hands. And into that civilization went the sweat, the heart, the soul, and the dreams of toilers since man left the trees and caves as his earliest habitation. When we look around our own western continent and see the wonders performed by man—vain insect of an hour, as he is called by Byron—we cease to marvel at the fabulous accomplishments of Hercules.

A continent ruled absolutely by wild and untamed nature before Columbus touched its shores has been conquered, subdued by civilization in an incredibly short period. From the far north to the extremity of Patagonia, civilization, the work of toilers, is nearly triumphant, but with even greater triumphs ahead.

The wilderness has disappeared before and under the axe of the pioneer and the farmer. The desert has been made to blossom as the rose by those who followed the law implanted in the Aryan breast, "Westward, ever westward." Swamps were drained and reclaimed, mountain tops that now delight the eye with a gorgeous agricultural splendor that surpasses in sheer beauty anything in the world of art or related in the Arabian Nights were chiseled and sculptured by pioneer farmers. Now millions of farms dot the landscape where once the jungle reigned supreme from ocean to ocean. Hamlets, villages, towns, cities, States, republics follow in orderly succession from the Arctic to the Antarctic Seas. Churches, schools, highways, railway, telegraph lines, skyscrapers, bridges, tunnels, subways, residential palaces, urban and rural, parks, squares, railroad stations more impressive than the Pyramids or Karnak, locomotives, steamships, all making for such a stupendous creation that we are convinced that man is indeed made in the image of his Maker. Great and splendid and perhaps enduring are his material accomplishments—but the Armageddon lies ahead, and not far ahead. Civilization, great, gorgeous, and wonderful as it may be, can not boast of its own justification until by a coalition of all of its forces it vanquishes poverty permanently and permits all of God's children to share in the benefits it creates and which should be equitably bestowed.

The tremendous mechanicalization of industry has brought into existence problems which if not solved will lead to that destruction which Frankenstein's monster wrought to his maker. Industry's greatest menace to-day is its apparently inevitable and inseparable tendency to that overproduction which would mean its ruin. But labor, which conquers all things and has put the world under man's feet, is at hand to save industry with a remedy that will prevent overproduction and equalize output with consumption. That remedy lies in the 5-day week, without any diminution of the wage scale, for it is the wage scale that determines consumption, and either hushes the hum of factory wheels or revolves them with music to the ear of the employee and employer. Not only will a great problem be met in this way, but a forward step will be taken which will make for more happiness than has resulted as yet from any movement of capital and labor.

In his monumental work, Buckle in the History of Civilization in England points out and argues eloquently for a leisure class on the ground that it is by the contemplation afforded through leisure that the world's greatest accomplishments have been consummated. If that be true, and I have no doubt that it is at least partially so, how much more will men and women do in every field of science when all are permitted to enjoy a leisure which will permit the use of the microscope and telescope and the study of the universe.

Mr. Chairman, I hope I am looking with prophetic eye into the future. I hope I am looking even from afar into the promised land, the land that is flowing with milk and honey. The day should be all the brighter the night has been so long and so dark. It will give joy to those choice spirits who slaved and starved in the night of despotism, but who toiled on knowing that others would see the glories of the coming morn. Labor, omnia vincit. By its magic touch the enchanted valley will become a reality and the shadows of men will reach the stars. Under its civilizing and uplifting influence we will, astride Pegasus, wing our way to the Garden of Hesperides and there pick apples of gold from pictures of silver. As a result of a little leisure nature will give up more of her secrets to us, and drinking from the gushing streams of wisdom and knowledge we shall feel that even in life we are nearer my God to Thee.

Mr. BYRNS. Mr. Chairman, I yield 10 minutes to the gentleman from Oklahoma [Mr. HASTINGS].

Mr. HASTINGS. Mr. Chairman, this bill, for convenience, combines the appropriations for both the Treasury and Post Office Departments. It is the first appropriation bill to be considered during the present session of Congress. It is also the largest that will come up for consideration. The total amount recommended in the bill for the activities of the Government under the supervision of the Treasury Department, for the fiscal year ending June 30, 1930, aggregates $303,459,664, which is $18,744,877 less than the expenditures authorized in the appropriation bill for the current year, but is an increase of $36,230 over the Budget estimates.

On June 30, 1928, the gross public debt amounted to $17,604,290,563.

In addition to these expenditures authorized, I want to invite attention to the permanent and indefinite appropriations under the Treasury Department, which includes the sinking fund and interest on the public debt, and many other items of a permanent nature, estimated for the year 1930 at $1,219,342,810.82.

I want to invite attention to this in order that the public may understand that when the amounts authorized to be expended in the several appropriation bills are added up that the aggregate does not include all of the expenditures authorized.

The total Budget estimates for the fiscal year ending June 30, 1930, for all of the departments of the Government, including interest and sinking fund, and the Postal Service, aggregates $4,417,369,904.67.

The following table shows these estimates in detail:

	Estimates of appropriations, 1930	Appropriations, 1929
Legislative establishment	$18,919,730.64	$17,913,873.26
Executive Office	458,120.00	437,180.00
Independent establishments:		
Alaska relief funds	15,000.00	15,000.00
American Battle Monuments Commission	600,000.00	700,000.00
Arlington Memorial Bridge Commission	2,000,000.00	2,300,000.00
Board of Mediation	348,270.00	347,902.00
Board of Tax Appeals	725,863.00	720,740.00
Bureau of Efficiency	228,130.00	210,350.00
Civil Service Commission	1,251,562.00	1,130,352.00
Commission of Fine Arts	9,080.00	7,300.00
Employees' Compensation Commission	4,077,326.00	3,755,010.00
Federal Board for Vocational Education	8,176,120.00	8,220,000.00
Federal Power Commission	179,500.00	120,890.00
Federal Radio Commission	164,440.00	364,027.00
Federal Reserve Board	2,605,741.00	2,700,000.00
Federal Trade Commission	1,289,760.00	1,048,000.00
General Accounting Office	4,132,000.00	3,820,000.00
Housing Corporation	397,950.00	475,750.00
Interstate Commerce Commission	8,213,825.00	7,654,745.00
National Advisory Committee for Aeronautics	1,300,000.00	600,000.00
Public Buildings and Public Parks	2,888,061.00	2,652,980.00
Smithsonian Institution	1,107,573.00	1,004,162.00
Tariff Commission	815,000.00	754,000.00
United States Geographic Board	9,200.00	4,300.00
United States Shipping Board and Merchant Fleet Corporation	9,994,000.00	13,688,750.00
United States Veterans' Bureau	597,375,000.00	560,060,000.00
Miscellaneous		214,374.00
Total Executive Office and independent establishments	648,361,521.00	613,005,812.00
Department of Agriculture	154,232,131.00	154,723,793.88
Department of Commerce	58,459,749.00	38,375,530.00
Department of the Interior	310,957,045.78	300,632,539.00
Department of Justice	28,103,570.00	26,808,062.50
Department of Labor	10,719,430.00	11,078,340.00
Navy Department	349,125,482.00	364,233,362.00
Post Office Department, postal deficiency payable from Treasury	71,209,325.00	83,495,830.00
State Department	14,744,831.43	14,466,236.39
Treasury Department	329,698,615.80	345,940,278.00
War Department, including Panama Canal	444,835,222.00	408,605,351.50
District of Columbia	39,935,622.00	40,357,308.00
Total ordinary	2,479,302,275.65	2,419,636,316.53
Reduction in principal of the public debt:		
Sinking fund	379,524,129.02	370,153,407.56
Other redemptions of the debt	173,543,500.00	172,289,300.00
Principal of the public debt	553,067,629.02	542,442,707.56
Interest on the public debt	640,000,000.00	675,000,000.00
Total payable from the Treasury	3,672,369,904.67	3,637,079,024.09
Postal Service, payable from postal revenues	745,000,000.00	690,949,212.00
Total, including Post Office Department and Postal Service	4,417,369,904.67	4,328,028,236.09

The 1929 appropriations are exclusive of additional amounts required to meet the provisions of the act approved May 28, 1928, amending the classification act of 1923, approximately $20,000,000.

The estimated receipts of the Government for the next fiscal year are given as $3,841,295,829, as shown by the following table:

Receipts	Estimated, 1930	Estimated, 1929	Actual, 1928
Customs	$582,000,000.00	$582,000,000.00	$568,986,188.50
Income tax	2,175,000,000.00	2,165,000,000.00	2,173,952,556.73
Miscellaneous internal revenue	559,000,000.00	577,500,000.00	621,018,665.64
Miscellaneous receipts	525,295,829.00	507,235,661.00	678,390,745.32
Total receipts	3,841,295,829.00	3,831,735,661.00	4,042,348,156.19
Total expenditures (including reductions of the public debt required by law to be made from ordinary receipts)	3,780,719,647.00	3,794,745,469.00	3,643,519,875.13
Excess of receipts	60,576,182.00	36,990,192.00	398,828,281.06

This, of course, is exclusive of postal receipts.

Attention is invited to the fact that during the fiscal year ending June 30, 1928, $2,173,952,555.73 was collected through the income tax, individual and corporate, and that it is estimated that there will be collected from this source, for the year ending June 30, 1930, the sum of $2,175,000,000.

The appropriations for the Treasury Department include the clerical force in the Treasury Department and the Bureau of Customs, through which was collected during the past fiscal year $568,986,188.50, and it was estimated there will be collected for the year ending June 30, 1930, $582,000,000, and all other bureaus under the supervision of the Treasury Department.

There is recommended for the Federal Farm Loan Bureau, salaries and expenses, $940,000. For the enforcement of prohibition, $13,500,000. This is an increase of $100,000 over the Budget estimate. For public buildings—continuation of construction—$23,040,000. Additional estimates for public buildings are to be made at a later date to be carried in the deficiency appropriation bill, estimated to approximate about $35,000,000.

POST OFFICE DEPARTMENT

The total amount recommended for expenditures for the Postal Service for the year ending June 30, 1930, aggregates $813,215,725, which is an increase of $38,990,683 over the appropriations for the current year, but is a reduction of $2,773,600 under the estimates of the Bureau of the Budget.

The expenditures for the Postal Service are paid out of the postal revenues, and the deficit, which for the past fiscal year amounted to $32,121,095.80, is paid out of the Treasury. The postal revenues for the past year increased $10,511,932.79. It will be remembered that we enacted some new legislation during the past year restoring the 1-cent rate for private mailing and postal cards and made a reduction on parcel-post rates. We also authorized the payment of rent, fuel, light, and equipment for fourth-class postmasters, equal to 15 per cent of their compensation.

On June 30, 1928, there were 34,305 fourth-class postmasters. They are underpaid and, in my judgment, are the poorest paid employees in the entire Government service. Their duties are exacting. This branch of our Postal Service should be carefully studied with a view of providing more equitable compensation for them.

Under the supervision of the Fourth Assistant Postmaster General is the Rural Mail Service, in which I have always been very greatly interested.

The first experimental Rural Mail Service was established October 1, 1896, when three routes were started in West Virginia. The service has been rapidly expanded and there were in operation on June 30, 1928, 44,288 routes, supplying about 7,141,792 families, or approximately 24,282,092 individuals. Of this number 1,224 routes are in Oklahoma and 92 are in the second congressional district. In looking back over my term of service I find that the appropriation for this branch of the service, the first year I came to Congress, in 1914, was $53,000,000. For this item the present bill recommends $107,000,000. While the number of routes are decreasing the service is expanding, because many of the routes are motorized and there have been many consolidations. The standard route is 24 miles in length, whereas the average route is 29.119 miles in length. The rural mail carriers are rendering a splendid service. They are active, intelligent, painstaking employees of the Government. They render this service through all kinds of weather and are always prompt and courteous.

The expenditures for the Postal Service present an interesting study. In 1837 the total expenditures for this service amounted to $3,288,319.03 and there were 11,767 post offices. We then had an estimated population of 15,655,000. For the year ending June 30, 1928, the expenditures increased to $725,699,765.90. The total number of post offices was 49,944 and our population is estimated at 120,023,000.

In addition to the Rural Mail Service, there were on June 30, 1928, 11,472 star routes, along all of which rural patrons are served.

We are rapidly expanding our air-mail service. The rate of letter postage has been reduced from 10 cents to 5 cents, and within the next few years, through legislative encouragement, a large part of the first-class mail will be carried by this service.

The appropriation for this service for 1928 was $4,500,000. There is carried in this bill the sum of $13,300,000 for this service. The air service should be encouraged in every way. No one can vision the possibilities of this service in the next decade.

The aggregate amount authorized to be appropriated, both for the Treasury and Post Office Departments, recommended in this bill, is $1,116,675,389. [Applause.]

Mr. WOOD. Mr. Chairman, I ask that the Clerk read.

The Clerk read as follows:

TITLE I—TREASURY DEPARTMENT

That the following sums are appropriated, out of any money in the Treasury not otherwise appropriated, for the Treasury Department for the fiscal year ending June 30, 1930, namely:

Mr. WOOD. Mr. Chairman, I move that the committee do now rise.

The motion was agreed to.

Accordingly the committee rose; and the Speaker having resumed the chair, Mr. SNELL, Chairman of the Committee of the Whole House on the state of the Union, reported that that com-

mittee, having had under consideration the bill (H. R. 14801) making appropriations for the Treasury and Post Office Departments for the fiscal year ending June 30, 1930, and for other purposes, had come to no resolution thereon.

MESSAGES FROM THE PRESIDENT

The SPEAKER. The Chair lays before the House the following message from the President:

PHILIPPINE ISLANDS

The Clerk read as follows:

To the Congress of the United States:

As required by section 19 of the act of Congress approved August 29, 1916, entitled "An act to declare the purpose of the people of the United States as to the future political status of the people of the Philippine Islands, and to provide a more autonomous government for those islands," I transmit herewith a set of the laws and resolutions adopted by the Seventh Philippine Legislature during its third session, from July 16 to November 9, 1927.

CALVIN COOLIDGE.

THE WHITE HOUSE, *December 6, 1928.*

The SPEAKER. Referred to the Committee on Insular Affairs. Also the following message from the President:

PORTO RICO

The Clerk read as follows:

To the Congress of the United States:

As required by section 23 of the act of Congress approved March 2, 1917, entitled "An act to provide a civil government for Porto Rico, and for other purposes," I transmit herewith copies of the laws and resolutions enacted by the Eleventh Legislature of Porto Rico during its third regular session (February 13 to April 15, 1928).

These acts and resolutions have not previously been transmitted to the Congress, and none of them has been printed as a public document.

CALVIN COOLIDGE.

THE WHITE HOUSE, *December 6, 1928.*

The SPEAKER. Referred to the Committee on Insular Affairs. Also the following message from the President:

NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS

The Clerk read as follows:

To the Congress of the United States:

In compliance with the provisions of the act of March 3, 1915, establishing the National Advisory Committee for Aeronautics, I submit herewith the fourteenth annual report of the committee for the fiscal year ended June 30, 1928.

The attention of the Congress is invited to Part V of the committee's report presenting an outline of the present state of aeronautical development. It is encouraging to note from the committee's report that not only has aeronautic progress been at an accelerated rate within recent years but the progress has been greater in 1928 than in any single previous year. The significance of this to the American people and to the advancement of civilization can but faintly be pictured in the light of the amazing development that has characterized the first 25 years of aviation.

This country may well be proud of the contribution it has made to this remarkable development, and I am satisfied that continued support of proven policies will assure the further progress of American aviation. I concur in the committee's opinion that there is need for continuous prosecution of scientific research in order that this progress may continue at the maximum rate.

CALVIN COOLIDGE.

THE WHITE HOUSE, *December 6, 1928.*

The SPEAKER. Ordered printed and referred to the Committees on Military Affairs, Naval Affairs, and Interstate and Foreign Commerce. The Chair also lays before the House the following message from the President.

REPORT OF THE COUNCIL OF NATIONAL DEFENSE

The Clerk read as follows:

To the Congress of the United States:

In compliance with paragraph 5, section 2, of the Army appropriation act approved August 29, 1916, I transmit herewith the Twelfth Annual Report of the Council of National Defense for the fiscal year ended June 30, 1928.

CALVIN COOLIDGE.

THE WHITE HOUSE, *December 6, 1928.*

The SPEAKER. Referred to the Committee on Military Affairs. Also the following message from the President:

FIFTH INTERNATIONAL CONGRESS OF MILITARY MEDICINE AND PHARMACY

The Clerk read as follows:

To the Congress of the United States:

I transmit herewith a report by the Secretary of State recommending, at the request of the Secretary of the Treasury, the Secretary of War, and the Secretary of the Navy, constituting, together with the Surgeons General of the three Medical Services of the Treasury, War, and Navy Departments, an Advisory Board under the Federal act to incorporate the Association of Military Surgeons of the United States, approved January 30, 1903, that Congress be requested to authorize an appropriation of $5,000 for the payment of expenses of delegates of the United States to the Fifth International Congress of Military Medicine and Pharmacy to be held at London, England, in 1929.

The recommendation has my approval, and I request of Congress legislation authorizing an appropriation of $5,000 for the purpose of participation by the United States by official delegates in the Fifth International Congress of Military Medicine and Pharmacy to be held in London in 1929.

CALVIN COOLIDGE.

THE WHITE HOUSE, *December 6, 1928.*

The SPEAKER. Referred to the Committee on Foreign Affairs and ordered printed. Also the following message.

CHRISTOPHER COLUMBUS MEMORIAL LIGHTHOUSE

The Clerk read as follows:

To the Congress of the United States:

I transmit a report from the Secretary of State on the subject of the Christopher Columbus Memorial Lighthouse to be erected by the Governments and peoples of the Americas on the coast of the Dominican Republic at Santo Domingo, and commend to the favorable consideration of the Congress the recommendation of the Secretary of State, as contained in the report that legislation be enacted authorizing the appropriation of the sum of $871,655 as the share of the United States in this project.

CALVIN COOLIDGE.

THE WHITE HOUSE, *December 6, 1928.*

The SPEAKER. Referred to the Committee on Foreign Affairs and ordered printed. Also the following message:

ANNUAL REPORT OF ALASKA RAILROAD

The Clerk read as follows:

To the Congress of the United States:

I transmit herewith for the information of the Congress the annual report of the Alaska railroad for the fiscal year ended June 30, 1928.

CALVIN COOLIDGE.

THE WHITE HOUSE, *December 6, 1928.*

The SPEAKER. Referred to the Committee on the Territories. Also the following message from the President:

ANNUAL REPORT GOVERNOR PANAMA CANAL

The Clerk read as follows:

To the Congress of the United States:

I transmit herewith for the information of the Congress the annual report of the Governor of the Panama Canal for the fiscal year ended June 30, 1928.

CALVIN COOLIDGE.

THE WHITE HOUSE, *December 6, 1928.*

The SPEAKER. Referred to the Committee on Interstate and Foreign Commerce.

Mr. TILSON. Mr. Speaker, I desire to ask unanimous consent that the gentleman from Ohio [Mr. BURTON] may have until midnight to-night to introduce a bill or resolution relative to the settlement of the debt of Austria to the United States.

The SPEAKER. Is there objection?

Mr. GARRETT of Tennessee. Do I understand he is to introduce a bill?

Mr. TILSON. He wishes to introduce a bill. I understand there will probably be a meeting of the committee to-morrow, and it is desirable to have the bill introduced so that it may be considered.

Mr. CRISP. Mr. Speaker, I may say to my colleague from Tennessee that we have a bill already pending before the committee, and the Committee on Ways and Means will have a hearing on it to-morrow. The Treasury Department preferred to have the form of the bill changed, and I concur in that. The object of this inquiry is to have a new bill introduced in a new form.

Mr. GARNER of Texas. My recollection is that in the last Congress the committee reported a bill on the same subject,

and it was pending in the House. The gentleman from Ohio [Mr. BURTON] was trying to push it at the last moment.

Mr. SNELL. There was a bill pending before Congress, but this is a new bill.

Mr. GARNER of Texas. But it involves the same proposition?

Mr. SNELL. Yes; but it is a new bill.

MESSAGE FROM THE SENATE

A message from the Senate, by Mr. Craven, its principal clerk, announced that the Senate agrees to the amendments of the House of Representatives to the bill (S. 3325) entitled "An act for the relief of Horace G. Knowles."

The message also announced that the Senate had passed without amendment a bill of the following title:

H. R. 13824. An act authorizing L. L. Montague, his heirs, legal representatives, and assigns, to construct, maintain, and operate a bridge across the Columbia River at or near Arlington, Oreg.

SENATE ENROLLED BILL SIGNED

The SPEAKER announced his signature to an enrolled bill of the Senate of the following title:

S. 3325. An act for the relief of Horace G. Knowles.

BILLS PRESENTED TO THE PRESIDENT

Mr. CAMPBELL, from the Committee on Enrolled Bills, reported that this day they presented to the President of the United States for his approval bills of the House of the following titles:

H. R. 10869. An act amending section 764 of Subchapter XII, fraternal beneficial associations, of the Code of Law for the District of Columbia.

H. R. 13753. An act authorizing an expenditure of certain funds standing to the credit of the Cherokee Nation in the Treasury of the United States to be paid to one of the attorneys for the Cherokee Nation, and for other purposes.

LEAVE OF ABSENCE

By unanimous consent Mr. UNDERWOOD (at the request of Mr. MCSWEENEY) was granted leave of absence, for 10 days, on account of illness.

ADJOURNMENT

Mr. WOOD. Mr. Speaker, I move that the House do now adjourn.

The motion was agreed to; accordingly (at 4 o'clock and 44 minutes p. m.) the House adjourned until to-morrow, Friday, December 7, 1928, at 12 o'clock noon.

COMMITTEE HEARINGS

Mr. TILSON submitted the following tentative list of committee hearings scheduled for Friday, December 7, 1928, as reported to the floor leader by clerks of the several committees:

COMMITTEE ON APPROPRIATIONS

(10.30 a. m.)

State, Justice, Commerce, and Labor Departments appropriation bill.

Agriculture Department appropriation bill.

War Department appropriation bill.

NAVAL AFFAIRS COMMITTEE

(10.30 a. m.)

To consider bills on the committee's calendar.

EXECUTIVE COMMUNICATIONS, ETC.

Under clause 2 of Rule XXIV, executive communications were taken from the Speaker's table and referred as follows:

647. A letter from the Comptroller General of the United States, transmitting annual report of the Accounting Office for the fiscal year 1928 (H. Doc. No. 362); to the Committee on Expenditures in the Executive Departments.

648. A letter from the chairman of the Interstate Commerce Commission, transmitting the forty-second annual report for the fiscal year 1928 (H. Doc. No. 376); to the Committee on Interstate and Foreign Commerce and ordered to be printed.

CHANGE OF REFERENCE

Under clause 2 of Rule XXII, the Committee on Invalid Pensions was discharged from the consideration of the bill (H. R. 14388) granting a pension to Emma Love, and the same was referred to the Committee on Pensions.

PUBLIC BILLS AND RESOLUTIONS

Under clause 3 of Rule XXII, public bills and resolutions were introduced and severally referred as follows:

By Mr. COOPER of Ohio: A bill (H. R. 14919) granting the consent of Congress to the commissioners of Mahoning County, Ohio, to construct a bridge across the Mahoning River at Cedar Street, Youngstown, Mahoning County, Ohio; to the Committee on Interstate and Foreign Commerce.

By Mr. COOPER of Wisconsin: A bill (H. R. 14920) granting the consent of Congress to the State of Wisconsin to construct, maintain, and operate a free highway bridge across the Rock River at or near Center Avenue, Janesville, Rock County, Wis.; to the Committee on Interstate and Foreign Commerce.

By Mr. WOOD: A bill (H. R. 14921) granting the consent of Congress to the Chicago South Shore & South Bend Railroad to construct, maintain, and operate a railroad bridge across the Grand Calumet River at East Chicago, Ind; to the Committee on Interstate and Foreign Commerce.

By Mr. BRITTEN: A bill (H. R. 14922) to authorize an increase in the limit of cost of two fleet submarines; to the Committee on Naval Affairs.

Also, a bill (H. R. 14923) to amend the naval appropriation act for the fiscal year ending June 30, 1916, relative to the appointment of pay clerks and acting pay clerks; to the Committee on Naval Affairs.

By Mr. LEATHERWOOD: A bill (H. R. 14924) to authorize the Secretary of War to grant to the city of Salt Lake, Utah, a portion of the Fort Douglas Military Reservation, Utah, for street purposes; to the Committee on Military Affairs.

By Mr. LEAVITT: A bill (H. R. 14925) to authorize repayment of certain excess amounts paid by purchasers of lots in the town site of Bowdoin, Mont., and for other purposes; to the Committee on Public Lands.

By Mr. BOWMAN: A bill (H. R. 14926) granting military status to field clerks, engineer service at large, American Expeditionary Forces; to the Committee on Military Affairs.

By Mr. CONNERY: A bill (H. R. 14927) to amend the tariff act of 1922; to the Committee on Ways and Means.

By Mr. CORNING: A bill (H. R. 14928) donating bronze trophy guns to the Cohoes Historical Society, Cohoes, N. Y.; to the Committee on Military Affairs.

By Mr. GOODWIN: A bill (H. R. 14929) for the improvement of the Mississippi River at Minneapolis, Minn.; to the Committee on Rivers and Harbors.

By Mr. JOHNSON of Washington: A bill (H. R. 14930) to provide hospital and dispensary treatment to veterans suffering disabilities not service connected; to the Committee on World War Veterans' Legislation.

By Mr. SIMMONS: A bill (H. R. 14931) to amend section 93 of the Judicial Code establishing the judicial district of Nebraska; to the Committee on the Judiciary.

By Mr. WHITE of Colorado: A bill (H. R. 14932) to amend the World War veterans' act as amended; to the Committee on World War Veterans' Legislation.

By Mr. HALE: A bill (H. R. 14933) for the conservation, care, custody, protection, and operation of the naval petroleum and oil-shale reserves, and for other purposes; to the Committee on Naval Affairs.

By Mr. BERGER: A bill (H. R. 14934) to enforce the rights of citizens of the United States, to protect them against intimidation and threats, to punish conspiracies against such rights of citizens, and for other purposes; to the Committee on the Judiciary.

By Mr. COOPER of Wisconsin: A bill (H. R. 14935) to amend chapter 6, title 44, of the United States Code by inserting a new section to be known as section 189 A; to the Committee on Printing.

By Mr. FULMER: A bill (H. R. 14936) authorizing an appropriation of $15,000,000 for the purchase of seed, feed, and fertilizer to be supplied to farmers in the crop-failure areas of the United States, and for other purposes; to the Committee on Agriculture.

By Mr. RAGON: A bill (H. R. 14937) releasing all claims of the United States in respect to Government-owned equipment loaned to the Governor of Arkansas for use at the encampment of the United Confederate Veterans, which was held at Little Rock, Ark., in May, 1928; to the Committee on Military Affairs.

By Mr. FULMER: A bill (H. R. 14938) to provide for the use of net weights in interstate and foreign commerce transactions in cotton, to provide for the standardization of bale covering for cotton, and for other purposes; to the Committee on Agriculture.

By Mr. SEARS of Florida: A bill (H. R. 14939) for improvement of navigation and the control of floods of Caloosahatchee River and Lake Okeechobee and its drainage area, Florida; to the Committee on Flood Control.

By Mr. CANNON: A bill (H. R. 14940) to establish a Federal farm board to aid in the orderly marketing and in the control and disposition of the surplus of agricultural commodities in interstate and foreign commerce; to the Committee on Agriculture.

By Mr. BYRNS: Joint resolution (H. J. Res. 337) providing for a joint committee of the Senate and House of Representatives on reorganization of the administrative services of the Government; to the Committee on Rules.

By Mr. TAYLOR of Colorado: Joint resolution (H. J. Res. 338) restricting the Federal Power Commission from issuing or approving any permits or licenses affecting the Colorado River or any of its tributaries; to the Committee on Interstate and Foreign Commerce.

By Mr. BURTON: Joint resolution (H. J. Res. 340) to authorize the Secretary of the Treasury to cooperate with the other relief creditor governments in making it possible for Austria to float a loan in order to obtain funds for the furtherance of its reconstruction program, and to conclude an agreement for the settlement of the indebtedness of Austria to the United States; to the Committee on Ways and Means.

PRIVATE BILLS AND RESOLUTIONS

Under clause 1 of Rule XXII, private bills and resolutions were introduced and severally referred as follows:

By Mr. ALDRICH: A bill (H. R. 14941) granting an increase of pension to Lamira E. Albro; to the Committee on Invalid Pensions.

By Mr. BECK of Pennsylvania: A bill (H. R. 14942) granting an increase of pension to Anna M. Kabel; to the Committee on Invalid Pensions.

By Mr. BEEDY: A bill (H. R. 14943) granting an increase of pension to Hattie L. Daly; to the Committee on Invalid Pensions.

By Mr. BLAND: A bill (H. R. 14944) granting an increase of pension to Frederick L. Eagle; to the Committee on Pensions.

By Mr. BOIES: A bill (H. R. 14945) granting an increase of pension to Sarah O'Neill; to the Committee on Invalid Pensions.

By Mr. BRAND of Ohio: A bill (H. R. 14946) granting an increase of pension to Mary E. Jenkins; to the Committee on Invalid Pensions.

Also, a bill (H. R. 14947) granting an increase of pension to Lida J. Lawrence; to the Committee on Invalid Pensions.

Also, a bill (H. R. 14948) granting an increase of pension to Emma Purnell; to the Committee on Invalid Pensions.

Also, a bill (H. R. 14949) granting an increase of pension to Elizabeth J. Hinkson; to the Committee on Invalid Pensions.

Also, a bill (H. R. 14950) granting an increase of pension to Margaret Ivers; to the Committee on Invalid Pensions.

By Mr. BROWNE: A bill (H. R. 14951) granting an increase of pension to Carrie C. Fry; to the Committee on Invalid Pensions.

By Mr. BURTON: A bill (H. R. 14952) to reimburse the estate of Mary Agnes Roden; to the Committee on Claims.

By Mr. CANNON: A bill (H. R. 14953) granting a pension to Alice F. Pritchett; to the Committee on Invalid Pensions.

Also, a bill (H. R. 14954) granting a pension to Sariah A. Wilds; to the Committee on Invalid Pensions.

Also, a bill (H. R. 14955) granting a pension to Miles A. Williams; to the Committee on Invalid Pensions.

Also, a bill (H. R. 14956) granting a pension to Addie R. Thomas; to the Committee on Invalid Pensions.

Also, a bill (H. R. 14957) granting a pension to Magnolia Roberts Powell; to the Committee on Invalid Pensions.

Also, a bill (H. R. 14958) granting a pension to Mary E. Ruffin; to the Committee on Invalid Pensions.

Also, a bill (H. R. 14959) granting an increase of pension to Jesse S. Trower; to the Committee on Invalid Pensions.

By Mr. CHINDBLOM: A bill (H. R. 14960) for the relief of Charles G. Brainard; to the Committee on Claims.

By Mr. CLANCY: A bill (H. R. 14961) granting a pension to Roxanna Perry; to the Committee on Invalid Pensions.

By Mr. COCHRAN of Missouri: A bill (H. R. 14962) granting an increase of pension to Kate D. Smith; to the Committee on Invalid Pensions.

By Mr. COOPER of Ohio: A bill (H. R. 14963) granting a pension to Hannah Godward; to the Committee on Invalid Pensions.

By Mr. DENISON: A bill (H. R. 14964) granting an increase of pension to Sarah M. Sadler; to the Committee on Invalid Pensions.

Also, a bill (H. R. 14965) granting an increase of pension to Hulda Johnson; to the Committee on Invalid Pensions.

By Mr. FREAR: A bill (H. R. 14966) granting a pension to Marie Thorson; to the Committee on Pensions.

By Mr. HUGHES: A bill (H. R. 14967) granting an increase of pension to Martha J. Underwood; to the Committee on Invalid Pensions.

By Mr. JOHNSON of Washington: A bill (H. R. 14968) granting a pension to Minnie A. Squires; to the Committee on Invalid Pensions.

Also, a bill (H. R. 14969) granting a pension to Lizzie A. Nellis; to the Committee on Pensions.

Also, a bill (H. R. 14970) granting an increase of pension to Melvina Cannon; to the Committee on Invalid Pensions.

Also, a bill (H. R. 14971) granting an increase of pension to Emma B. Haines; to the Committee on Invalid Pensions.

Also, a bill (H. R. 14972) for the relief of Sylvester S. Thompson; to the Committee on Military Affairs.

Also, a bill (H. R. 14973) for the relief of Grant R. Kelsey, alias Vincent J. Moran; to the Committee on Naval Affairs.

By Mr. KADING: A bill (H. R. 14974) granting an increase of pension to Daniel B. W. Stocking; to the Committee on Pensions.

By Mrs. KAHN: A bill (H. R. 14975) for the relief of Capt. William Cassidy; to the Committee on Military Affairs.

Also, a bill (H. R. 14976) to correct the military record of John G. Wiest; to the Committee on Military Affairs.

By Mr. KENDALL: A bill (H. R. 14977) granting a pension to Sanford C. Mackey; to the Committee on Invalid Pensions.

Also, a bill (H. R. 14978) granting a pension to Malissa Anna Mackey; to the Committee on Invalid Pensions.

By Mr. KIESS: A bill (H. R. 14979) granting a pension to Wilber Green; to the Committee on Invalid Pensions.

Also, a bill (H. R. 14980) granting an increase of pension to Lydia Hannah Barr; to the Committee on Invalid Pensions.

By Mr. LEAVITT: A bill (H. R. 14981) for the relief of Josephine Laforge (Sage Woman); to the Committee on Indian Affairs.

By Mr. MENGES: A bill (H. R. 14982) granting an increase of pension to Laura V. Drais; to the Committee on Invalid Pensions.

By Mr. MERRITT: A bill (H. R. 14983) granting a pension to Richard H. Gedda; to the Committee on Pensions.

By Mr. MOORE of Kentucky: A bill (H. R. 14984) granting an increase of pension to Willie H. Meek; to the Committee on Pensions.

By Mr. MOORMAN: A bill (H. R. 14985) for the relief of the estate of Thomas J. Jones, deceased; to the Committee on War Claims.

By Mr. MURPHY: A bill (H. R. 14986) granting a pension to Emma Hall; to the Committee on Invalid Pensions.

By Mr. NORTON of Nebraska: A bill (H. R. 14987) granting an increase of pension to Martha W. Cassell; to the Committee on Invalid Pensions.

By Mr. O'CONNOR of New York: A bill (H. R. 14988) granting a pension to Denis Keohane; to the Committee on Pensions.

By Mr. PRATT: A bill (H. R. 14989) for the relief of Norman S. Cooper; to the Committee on Naval Affairs.

By Mr. REID of Illinois: A bill (H. R. 14990) granting a pension to Anna Whitmore; to the Committee on Invalid Pensions.

By Mr. RUTHERFORD: A bill (H. R. 14991) granting a pension to James C. Howard; to the Committee on Pensions.

By Mr. SEARS of Florida: A bill (H. R. 14992) for the relief of Albert H. Jacobson; to the Committee on Claims.

By Mr. SIMMONS: A bill (H. R. 14993) granting an increase of pension to Malinda J. Cross; to the Committee on Invalid Pensions.

By Mr. SNELL: A bill (H. R. 14994) granting a pension to Lillie Eggsware; to the Committee on Invalid Pensions.

Also, a bill (H. R. 14995) granting an increase of pension to Elizabeth Barden; to the Committee on Invalid Pensions.

By Mr. SUMNERS of Texas: A bill (H. R. 14996) granting an increase of pension to Mary Kynette; to the Committee on Invalid Pensions.

Also, a bill (H. R. 14997) granting an increase of pension to Wilhelmina Wilson; to the Committee on Invalid Pensions.

By Mr. TAYLOR of Tennessee: A bill (H. R. 14998) granting a pension to Charles Rapier; to the Committee on Pensions.

By Mr. VESTAL: A bill (H. R. 14999) granting an increase of pension to Clara I. Birt; to the Committee on Invalid Pensions.

By Mr. VINSON of Kentucky: A bill (H. R. 15000) granting a pension to Laura J. Williams; to the Committee on Invalid Pensions.

Also, a bill (H. R. 15001) granting a pension to Walter Griffith; to the Committee on Pensions.

By Mr. WARE: A bill (H. R. 15002) for the relief of Maude E. Mayer; to the Committee on Foreign Affairs.

By Mr. YON: A bill (H. R. 15003) for the relief of Thomas N. Smith; to the Committee on Naval Affairs.

Also, a bill (H. R. 15004) for the relief of Florence P. Hampton; to the Committee on Claims.

By Mr. BRITTEN: Joint resolution (H. J. Res. 336) authorizing the Secretary of War to receive for instruction at the United States Military Academy at West Point, Roy Von Lewinski, citizen of Germany; to the Committee on Military Affairs.

By Mr. GAMBRILL: Joint resolution (H. J. Res. 339) conferring the rank, pay, and allowances of a major of Infantry, to date from March 24, 1928, upon Robert Graham Moss, late captain, Infantry, United States Army, deceased; to the Committee on Military Affairs.

PETITIONS, ETC.

Under clause 1 of Rule XXII, petitions and papers were laid on the Clerk's desk and referred as follows:

7882. Petition of Public Forum of Brooklyn Heights, New York City, opposed to the surrender of Muscle Shoals to private interests; to the Committee on Military Affairs.

7883. Petition of Niagara Falls Chamber of Commerce, petitioning Congress to reimburse the relatives of Jacob D. Hanson; to the Committee on Claims.

7884. By Mr. CRAMTON: Letter of November 27, 1928, from secretary Michigan State Farm Bureau, presenting resolution adopted by the board of directors of that organization urging enactment of a tariff of at least $3 per hundred on imported sugar; to the Committee on Ways and Means.

7885. By Mr. DE ROUEN (by request): Petition of Women's Christian Temperance Union of Eunice, La., requesting that Congress enact into law the Lankford Sunday rest bill for the District of Columbia (H. R. 78), or similar measures; to the Committee on the District of Columbia.

7886. By Mr. FRENCH: Petition of citizens of Wallace, Idaho, favoring the national origins plan of immigration restriction; to the Committee on Immigration and Naturalization.

7887. By Mr. LINDSAY: Petition of John W. Roeder, vice president, the People's National Bank of Brooklyn, N. Y., opposing the amendment of section 5219 of the Federal laws governing the taxation of national banks on the ground that it will be destructive of progress made in this matter; to the Committee on Ways and Means.

7888. By Mr. WATSON: Petition signed by residents of Trappe, Pa., and vicinity, favoring House bill 78, "To secure Sunday as a day of rest in the District of Columbia, and for other purposes"; to the Committee on the District of Columbia.

7889. By Mr. WYANT: Petition of Pennsylvania State Camp, Patriotic Order Sons of America, urging restriction of foreign immigration from Mexico, Central and South America, etc.; to the Committee on Immigration and Naturalization.

7890. Also, petition of Junior Order United American Mechanics, favoring passage of Senate bill 1727; to the Committee on the Civil Service.

7891. Also, petition of Joint Association of Postal Employees of Western Pennsylvania, recommending legislation permitting optional retirement after 30 years service with annuities increased to $1,200 per year; to the Committee on the Civil Service.

SENATE

FRIDAY, *December 7, 1928*

The Chaplain, Rev. ZeBarney T. Phillips, D. D., offered the following prayer:

Almighty God, in whose embrace all creatures live, and who dost bestow those benefits which human frailty can not grasp, quicken in us the sense of Thy presence, refresh us with Thy power.

Lift our souls above the weary round of harassing thoughts into the quiet contemplation of Thine infinite calm. Humble us by laying bare before us our littleness and our sin, and then exalt us by the revelation of Thyself as counselor and friend, that with a sure and steadfast faith in Thee we may quit ourselves like men, approved of God, and thus become springs of strength and joy to the Nation Thou hast called us to serve. Grant this for the sake of Him who is the Desire of nations, Jesus Christ, our Lord. Amen.

The Chief Clerk proceeded to read the Journal of yesterday's proceedings, when, on the request of Mr. JONES and by unanimous consent, the further reading was dispensed with and the Journal was approved.

MESSAGE FROM THE HOUSE—ENROLLED BILLS SIGNED

A message from the House of Representatives, by Mr. Haltigan, one of its clerks, announced that the Speaker had affixed his signature to the following enrolled bills, and they were signed by the Vice President:

S. 3325. An act for the relief of Horace G. Knowles; and

S. 4402. An act authorizing the Secretary of the Navy to assign to the Chief of Naval Operations the public quarters originally constructed for the Superintendent of the Naval Observatory in the District of Columbia.

DAUGHTERS OF THE AMERICAN REVOLUTION

The VICE PRESIDENT laid before the Senate a communication from the Secretary of the Smithsonian Institution transmitting, pursuant to law, the annual report of the National Society of the Daughters of the American Revolution for the year ended March 1, 1928, which was referred to the Committee on Printing.

REPORT OF THE UNITED STATES BOARD OF MEDIATION

The VICE PRESIDENT laid before the Senate a communication from the chairman of the United States Board of Mediation, transmitting, pursuant to law, the annual report of the board for the fiscal year ended June 30, 1928, which was referred to the Committee on Interstate Commerce.

PETITIONS AND MEMORIALS

Mr. VANDENBERG presented a petition of members of the Woman's Union and the Women's Missionary Society of the Central Woodward Christian Church, of Detroit, Mich., praying for the ratification of the so-called multilateral treaty renouncing war, and adoption of the so-called Gillett resolution (S. Res. 139) suggesting a further exchange of views relative to the world court, which was referred to the Committee on Foreign Relations.

Mr. WAGNER presented a resolution adopted by the council of the city of Long Beach, N. Y., which was referred to the Committee on Commerce and ordered to be printed in the RECORD as follows:

Resolution

CITY OF LONG BEACH,
November 27, 1928.

Mr. Hogan introduced and moved the adoption of the following resolution:

"Whereas a public hearing will be held in Washington on the deepening and widening of East Rockaway Inlet; and

"Whereas this improvement will permit of deep-draught vessels entering Reynolds Channel and Great South Bay and is of vital interest to the city of Long Beach: Now, therefore, be it

"*Resolved*, That this project be, and the same is hereby, approved and the necessary action by the Federal authorities to initiate the improvements urged by this board on behalf of the people of the city of Long Beach.

"Mr. Saltzman seconded the motion for the adoption of the above resolution.

"Voting: Mayor William J. Dalton, aye; Supervisor Thomas J. Hogan, aye; Councilman Charles L. Daly, aye; Councilman James M. Power, aye; Councilman Louis H. Saltzman, aye."

I hereby certify that the above is a true and exact copy of a resolution unanimously adopted by the council of the city of Long Beach, at a meeting of the council held at the city hall on Tuesday, November 27, 1928.

FRANK G. WALDRON, *City Clerk.*

Mr. SHEPPARD presented a petition of certain pastors of churches at Carbon, Tex., praying for the adoption of a constitutional amendment prohibiting sectarian appropriations, which was referred to the Committee on the Judiciary.

Mr. DENEEN presented a resolution adopted by the Chicago (Ill.) Council on Foreign Relations, favoring the prompt ratification of the so-called multilateral treaty renouncing war, which was referred to the Committee on Foreign Relations.

Mr. FRAZIER presented the petition of L. Noltimier and 62 other citizens, of Valley City, N. Dak., praying for the prompt ratification of the so-called multilateral treaty renouncing war, which was referred to the Committee on Foreign Relations.

Mr. KEYES presented a petition of members of the South Main Street Congregational Church, of Manchester, N. H., praying for the ratification of the so-called multilateral treaty renouncing war, which was referred to the Committee on Foreign Relations.

Mr. BINGHAM presented resolutions of the Northwest Child Welfare Club, of Hartford, the Westport Republican Woman's Club, and the Connecticut League of Women Voters, in the State of Connecticut, favoring the prompt ratification of the so-